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6 Socio-Economic Baseline

6.1 Overview and Context

The purpose of this social baseline chapter is to describe the existing social and economic status of the project's area potentially impacted by the KMT (see definitions in Section 6.2 below). Against this background, the baseline serves both as a reference, and as a backdrop for the determination and description of social and economic impacts.

In general the baseline study describes a sub-region characterized by economic decline and widespread poverty. In this context, government institutions are struggling to meet their mandates with limited resources. Economic activity continues, but a great deal of this activity is associated with efforts by poor people to secure basic livelihoods. Hence subsistence agriculture and informal mining are prominent.

Civil society structures such as non- Government and community- based organisations (NGOs and CBOs) are present in numbers, many of them providing support to the poor. Apart from KMT, several new mining ventures are in construction or early operations. These signal the potential for improvements in the social and economic circumstances of people in and around Kolwezi.

6.2 Spatial Extent of the Social Assessment

The social assessment presented below has focused on the *project impacted area*. This is the area in which broader environmental or socio-economic impacts might be experienced. The project impacted area includes traditional villages inside and immediately outside the Project concession area, mine villages immediately outside the Project concession area, and the town of Kolwezi (in the *Communes* of Dilala and Manika). The *project affected area* is defined as the area in which the project will permanently take land. Project *affected persons* (PAPs) are those who lose assets or income in this context.

6.3 Macro Economic Context

The World Bank classifies the DRC as a “highly indebted low income country”. Its Gross National Income (GNI) per capita of US\$ 110 is one of the lowest in Sub-Saharan Africa and among low income countries in general (World Bank website, 2005). No comparable information for Kolwezi District has been found, but gross district income per capita is unlikely to be above the national figure.

6.4 Institutional Arrangements

6.4.1 Levels of Government

The DRC has a multi-layered institutional system. Governance reflects a mix of modern and traditional systems, with government officials and traditional authorities responsible for specific administrative units. The hierarchy for Katanga Province is illustrated in Table 6.1 below.

Table 6.1: Institutional Hierarchy – Katanga Province

Administrative Unit	Head
Province	Governor
District	Mayor
<i>Territoire</i>	Administrator
<i>Commune</i>	<i>Bourgmestre</i>
<i>Secteur</i>	<i>Chef de secteur</i>
<i>Groupement</i>	<i>Chef de groupement</i>
Village	<i>Chef de village</i> or “Capita”

Within this framework, the project impacted area is subject to various layers of oversight and administration. These are the following:

- The District of Kolwezi, headed by the Mayor of Kolwezi.
- The *Territoire* of Mutshatsha, headed by its Administrator.
- The *Communes* of Dilala and Manika, headed by *Bourgmestres*.
- The *Secteur* of Luilu, headed by the *Chef de Secteur*.
- The *Groupement* Kazembe headed by the *Chef de Groupement* Kazembe.
- Traditional villages, headed by *Chefs de Village*, also referred to as “*Capitas*”.

In addition to these, *Chefs de Terre* (Land Chiefs) deal with land allocation and management in a given area, the boundaries of which are not necessarily consistent with those of administrative subdivisions. A substantial portion of the project impacted area is under the Jurisdiction of the *Chef de terre* Kamimbi (see Section 6.4.2).

6.4.2 Local Government

The key local government institution is the Office of the Mayor of Kolwezi (*la Mairie*). This office has jurisdiction over the entire Kolwezi District. In the project area, the *Mairie* oversees two urban *Communes* (Dilala and Manika) and two largely rural *Territoires* (Mutshatsha and Lubudi). The distribution of resources is heavily weighted toward the urban areas. The local activities and projects of sectoral ministries are coordinated via the *Mairie*, and priorities for development are determined. There is presently no formal development planning function, but the Office of the

Mayor annually produces an overview of the area socio-economic needs. There is potential to support their development planning for a more structural approach. This is discussed in Section 6.14.

According to the Mayor, his office is adequately staffed. However, the financial situation of the office is poor. The low income is attributed to non-payment of taxes by failing large enterprises such as Gécamines, low levels of payment at other levels due, amongst other things, to fraud and evasion, and low interest on taxes from the Province (*Etat des Lieux de la Ville de Kolwezi*, Office of the Mayor, 2006).

6.4.3 Land Management

All land in the DRC is vested in the State. Use is granted by the State in terms of concessions. Some land is managed by traditional leaders, and this role is officially recognized. *Chefs de Terre* allocate and authorize the use of small parcels of land, and may delegate this authority to *Chefs de village* for smaller agricultural plots. They informally receive an annual fee from the people to whom land is allocated. For bigger areas *Chefs de Terre* may allocate, but a temporary authorization for use will have to be granted at a higher level. In the project impacted area, *Chef de terre* Kamimbi plays the key role in allocation, with authorization through *Chef de Groupement* Kazembe. There is no legal restriction on women seeking access to land.

The *Service Urbain de l'Urbanisme et Habitat* (Town Planning and Housing) controls and regulates urban land concessions. In 2003, 26 concessions were recorded in Kolwezi District. Of these 14 were for residential purposes and 12 for social purposes (Office of the Mayor, Annual Report 2003).

6.5 Settlement Patterns and Settlement Types

There is no settlement in the project affected area. However, Samukonga village lies close to the proposed tailings. For reasons of community health and safety, the village and its residents will be resettled (See Figure 6.1). The following are the towns, villages and communities in the project impacted area. Kowezi proper and most of the mine villages are located in the largely urban *Communes* of Dilala and Manika. The remaining settlements fall under the largely rural/traditional *Groupement* Kazembe.

Table 6.2: Settlements in the Project Impacted Area

Type	Name	Administrative Area	Population
Traditional villages in the project concession area	Kamimbi (a)	<i>Groupement Kazembe</i>	970
	Kashala (b)	<i>Groupement Kazembe</i>	60
	Kipepa (c)	<i>Groupement Kazembe</i>	31
	Samukonga (c)	<i>Groupement Kazembe</i>	78
Traditional villages proximate to the project concession area	Kanyembo (b)	<i>Groupement Kazembe</i>	120
	Kisangama (b)	<i>Groupement Kazembe</i>	480
	Ndanzama (a)	<i>Groupement Kazembe</i>	120
	Samukinda (b)2`6	<i>Groupement Kazembe</i>	330
Informal mine villages proximate to the project concession area	Tshala (d)	<i>Groupement Kazembe</i>	7621
	Tshamudende	<i>Groupement Kazembe/Commune Dilala</i>	15,000
Formal mine villages proximate to the Project Concession Area (population included in <i>Commune Dilala</i>)	Luilu (d)	<i>Commune Dilala</i>	20000
	Musonoi	<i>Commune Dilala</i>	No information
	UZK (straddles the Concession area boundary) (d)	<i>Commune Dilala</i>	3100
Kolwezi proper	Western portion of "greater" Kolwezi, including Luilu, Musonoi and UZK villages	<i>Commune Dilala</i>	94.717
	Eastern portion of "greater" Kolwezi	<i>Commune Manika</i>	154 081

General Notes:

(1): Accurate and recent population figures (especially at local level) are difficult to secure in the DRC. The last official census was in 1985.

(2): The source of population figures for Kolwezi proper (Dilala and Manika) is the Annual Report 2006 (published in 2007) prepared by the Office of the Mayor of Kolwezi. The figures are undated in the Report. They are assumed to be estimates for 2006.

(3): Population figures for traditional villages and Tshala are based on the data set acquired from the territorial administrator for Muchacha by PACT Congo in January 2008.

The project impacted area has a population of about 240, 000. This comprises 94, 717 people in *Commune Dilala*, 154, 081 people in *Commune Manika*, and around 9, 100 people in the traditional villages and Tshala (see Section 6.8.1 for overall population figures).

The various settlement types have the following characteristics:

- Traditional villages: Small settlements of between ten and one hundred households. Housing is modest and services limited (see Sections 6.8.2 - 6.8.5). The villages fall under the immediate jurisdiction of the *Chefs de Village*.
- Mine villages: These "villages" are sizeable enclaves built by Gécamines to house workers and officials. Housing is mostly modest but solid, and some services are present (see Sections 6.8.2 -

6.8.5). The mine villages are located in the urban *Communes* of Dilala and Manika, and are in the areas of jurisdiction of the relevant *Bourgmestres*.

- Tshala village: Tshala has most of the characteristics of a traditional village (including housing types and limited services). However, it has its origin in an overflow from the mine settlements, and houses many people with an existing or former association with the mines.
- Tshamudende, the largest settlement in the area, is referred to as an ‘artisanal mining settlement’ by some, as many inhabitants are reportedly engaged in informal mining across the concessions of KOL, KMT and DCP. It falls partly under the administration of the Dilala commune.
- Kolwezi proper: The greater town of Kolwezi comprises two *Communes* – Dilala and Manika. It is the administrative and commercial hub of Kolwezi District, with numerous buildings housing government functions and non-government enterprises. There are several markets, hospitals, schools and clinics. The town has water and power, and some paved roads. Both power and water are intermittent, and many of the roads are in poor condition.

The proposed process effluent discharge into the Lulu River (Appendix 4.1) draws proximate settlements into the project impacted area. These are described in Appendix 6.1.

6.6 Social Survey Method

6.6.1 Information Collection

Substantial work around the KMT project had been undertaken prior to the social assessment. This work includes the Phase 1 Environmental Audit and Scoping Study (EASS), the Public Participation and Disclosure Programme (PCDP/SEP – see Annex G), the Interim RAP prepared to guide compensation associated with drilling (see Framework Resettlement Action Plan – Annex C) and various specialist investigations linked to the ESIA. Other materials consulted include: the DRC Mining Code, Mining Regulations and relevant Annexures; relevant World Bank Group (WBG) Policies, Procedures, Performance Standards, Safeguard Policies and Guidance / Good Practice Notes. Various reports produced by PACT Congo have also been consulted.

The project conducted several initiatives to collect further information relevant to the social assessment:

- Assembly of official documentation dealing with social and economic issues in the project impacted area. Key material includes annual reports prepared by the Office of the Mayor.
- Interviews with key informants in Kolwezi, covering areas such as the local economy, local and regional politics, labour and employment, agriculture, mining, land administration, municipal services, local government, traditional government, health, education, business, and non-government and community-based organizations (NGOs and CBOs).
- A household survey in five traditional villages and three “mine villages” in the project affected area (see Section 6.7).

- A survey of businesses in the Central Business District of Kolwezi, including the nature, source and price of goods on offer.
- A survey of two local markets, including the nature, source and price of goods on offer.
- Focus group discussions with women (two meetings) and youth (one meeting) to determine the degree of integration and participation in local social and economic structures, and hopes and fears associated with the KMT Project and the future of the project impacted areas as a whole.
- Interviews with key informants residing or engaging in activities close to the Luilu River (24 informants). See Appendix 6.1.

The information collected is sufficient for a representative and reliable social baseline. However the body of official documentation is limited and some of the material available is dated. The best source for Kolwezi was the Office of the Mayor, but reports from this source have significant gaps. Wherever possible the gaps have been filled through interviews with relevant officials.

The earlier findings have been updated with data from the Mayor's annual report for 2006, as well as PACT Congo's social survey in the area undertaken in January 2008 (PACT, 2008).

6.7 Household Survey

6.7.1 Site Selection and Sampling

The household survey covered seven settlements in the project impacted area and one outside (selected as a control). There are no settlements in the project affected areas (proposed tailings dam and plant). However Samukonga village lies close to the proposed tailings impoundment. For reasons of community health and safety, the village and its residents will be resettled.

The selection process sought a spread of interview sites, with an emphasis on settlements close to the project affected areas. The sampling strategy sought the most complete coverage of households in the traditional villages closest to the project affected area (Samukonga, Kipepa, Ndanzama, and Kamimbi). Sampling elsewhere sought to obtain indicative information. The distribution of household interviews is shown in Table 6.3 below.

Table 6.3: Distribution of Household Interviews

Community	Concession Area	Households	Interviews
Samukonga	In	22	6
Kipepa	In	10	7
Ndanzama	Out	18	4
Kamimbi	In	130	15
Mwilu	Out	70	14
Tshala	Out	1060	13
UZK	Partially in	408	17
Luilu / Tshamudende	Out	2560	12
Total			88

Note: See Table 6.2 for details of population and information sources.

The sample was stratified to be as representative as possible of various groups in the selected communities. All interviews took place in the homes of the respondents, and were conducted by a local team of four interviewers. The interviewers were trained prior to the survey. Interviews were conducted between 14 and 23 September 2004.

6.7.2 Questionnaire

The household questionnaire was designed using instruments successfully deployed elsewhere in francophone Africa¹. The questionnaire was designed to probe the following:

- Household structure and information about the household head (gender, literacy, education).
- Activities (primary, secondary and tertiary) of household members.
- Contributions of monetary income and non-monetary activities to the overall survival strategies of households.
- Household expenses and the balance between incomes and expenditure.
- Household agricultural practices, including crops and trees, the location and size of parcels of land farmed, and tenure arrangements for these parcels of land.
- Livestock and poultry farming, and products derived from them.
- Household housing arrangements (type, size, condition, tenure).
- Access to public services, including potable water, sanitation, electricity, other sources of energy, education, health care, transport, markets, credit providers and government services.
- Quality of life and levels of poverty (qualitative indicators).
- Household health status, including major illnesses and deaths (during 2003).
- Vulnerable individuals in households (very young children, the aged and pregnant women).
- Community-based organizations and community participation therein.
- Visions of the future of the area, and key areas for development support.

The questionnaire was translated into French, and was refined following piloting in the field.

¹ The questionnaire and survey method were designed in consultation with Frederic Giovannetti, an independent consultant on socio-economic and resettlement issues in French-speaking countries

6.8 Socio-Economic Status

6.8.1 Demography and Population Structure

Detailed population figures are contained in the 2006 Annual Report compiled by the Office of the Mayor. The date of the statistics is unspecified (assumed to be 2006), and the integrity of the information is unknown. The total population of Kolwezi District is shown as 591 947 (154 081 and 94 717 in Manika and Dilala respectively; 181 625 and 161 524 in Lubudi and Mutshatsha respectively). As indicated in Section 6.5 the population of the project impacted area is estimated at 240 000 (about 46% of the District population).

The population pyramid for the District in 2003 has the broad base and narrow apex of a population characterized by high birth and death rates, and high population growth². A key implication of this population structure is a high dependency ratio (many young dependents and relatively few supporting adults), exacerbated by widespread poverty.

There were some 4000 recorded foreign nationals in Kolwezi District in 2006. The large majority of foreign nationals are resident in the urban *Communes*.

6.8.2 Education and Literacy

Kolwezi District had 18 nursery schools, 124 primary schools and 62 secondary schools in 2006. There is also a technical college, the 'Institut Supérieur des Techniques Appliquées', and the University of Kolwezi (Office of the Mayor, 2006). Twenty four primary and seven secondary schools were managed by Gécamines in 2003.

In general the urban areas are better provided with educational institutions than the rural. Information for 2003 showed that there were 1.8 primary and high schools per 1000 population between the ages of 5 and 19 in Dilala. The ratio for Manika was 1.5 and for Mutshatsha 0.9. Many of the urban schools were managed by Gécamines, but options for divestment were being considered under the World Bank facilitated restructuring programme. Reported teacher – pupil ratios were reasonable in all areas, ranging between 1:16 and 1:32.

The mine villages in the project impacted area are relatively well provided with school facilities. Tshala had two primary schools, and Tchamudende had three primary schools and two secondary schools in 2008. However, the state of the infrastructure as well as the availability of materials and teachers is very poor (PACT, 2008). Some of these facilities are in poor condition, with a few requiring total rehabilitation (2006 Annual Report, Office of the Mayor, Kolwezi District). It is reported that Gécamines schools have lost teachers due to non-payment of salaries. Some traditional villages have community-funded primary schools (e.g. Kazembe Primary School in Kamimbi Village), but most of the smaller communities have to send their children elsewhere for primary and secondary education.

² The 1980-1994 population growth rate for the DRC is 3.2% (Source UNICEF website, November 2004). Growth figures for Kolwezi District have not been found.

Concern regarding low school attendance has been expressed by some NGOs. This is attributed partially to problems of access, poverty and the need for children to supplement household incomes through agriculture and digging (stone picking and artisanal mining). It is reported that many children register at the beginning of the academic year, but drop out of school during the course of the year (Ministry of Education, undated).

Adult illiteracy in the DRC as a whole is estimated at 40%. No specific figures for Kolwezi District have been found. The household survey explored literacy among household heads. The findings are the following:

- Kamimbi: 33% of surveyed household heads illiterate.
- Ndanzama: 25% of surveyed household heads illiterate.
- Kipepa: 57% of surveyed household heads illiterate.
- Samukonga: 50% of surveyed household heads illiterate.
- Luilu: 17% of surveyed household heads illiterate.
- UZK: 12% of surveyed household heads illiterate.
- Tshala: 8% of surveyed household heads illiterate.

Adult illiteracy is significantly higher in the traditional villages than in the mine villages. A similar dichotomy is evident with reference to education (see Table 6.4 below).

Table 6.4: Education Levels among Surveyed Household Heads

Community	% no education or incomplete primary	% primary or incomplete secondary	% secondary	% no response recorded
Kamimbi, Ndanzama, Kipepa, Samukonga	47%	38%	6%	9%
Luilu, UZK	21%	58%	21%	-
Tshala	23%	54%	15%	8%

6.8.3 Health and Welfare

Malaria is by far the most common of the reported serious diseases in Kolwezi District (see Table 6.5 below). Malaria (particularly), meningitis and measles were major causes of death in the District in 2006. Malnutrition is reported to be widespread, particularly among children, partially as result of diets that rely heavily on cassava. There is presently no preventative programme for malaria in the project impacted area (although there are plans for a joint programme by the mining companies operating in Kolwezi). Schistosomiasis (bilharzia) is endemic, but cases are not reported in material obtained from the Ministry of Health.

Table 6.5: Epidemiology (Kolwezi District: 2006)

Disease	Recorded Cases	Fatalities
Paralysis (cause unspecified)	27	0
Meningitis	187	20
Measles	2079	22
Neo-natal Tetanus	4	2
Diarrhoea	1456	14
Malaria	69955	288
Whooping Cough	28	0

Source: Office of the Mayor, 2006

Relative to other parts of Sub-Saharan Africa reported HIV/AIDS infection rates in Kolwezi District are low. There are no recent figures available. Ministry of Health figures for 2003 show that five out of 30 blood donors in a test were HIV positive (17%). In contrast with this figure, a Gécamines medical source reported the following levels: blood donors 4-5%; adults presenting for voluntary testing 3%; pregnant women reporting to clinics 2% (Gécamines Group West, 2004). A partial explanation for the low reported HIV/AIDS infection rate is limited exposure to populations with high rates. This is partially attributable to the relative isolation of Kolwezi, poor access roads and the unattractive local economy. With this in mind, medical informants see an influx of workers from elsewhere as a risk for the spread of HIV/AIDS. Word of mouth suggests that HIV/AIDS rates are now much higher than reported, due to infection spread by artisanal mining and via truck drivers.

Kolwezi District has one hospital, six clinics, eight polyclinics, 101 'aires de santé' and 73 health centres. The latter also play the role of dispensaries (Source: 2006 Annual Report, Office of the Mayor; Kolwezi District). Gécamines operates one hospital (HPK in Kolwezi), a "VIP" clinic (also in Kolwezi) and several centres. It is reported that the condition of many of the medical facilities in the project impacted area is deteriorating (Office of the Mayor, 2004). Gécamines has lost senior medical staff, but overall loss of medical staff across facilities has been limited, possibly due to a lack of employment elsewhere. Medicines are sometimes in short supply, due to limited funds. All health facilities charge for their services. In general services operated by Gécamines are more costly than those run by the State.

There are three health centres located close to the project affected area: in Tshamudende, Kamimbi and Tshala. In addition there are several small, private health dispensaries, primarily in Tshamudende. There is a lack of trained professionals and facilities, and as a result, common, preventable illness abounds. (PACT, 2008).

The household survey reveals that regular use is made of health centres. In both the mine villages and the traditional villages most cases of serious illness are treated in hospitals, suggesting reasonable access. From key informant interviews it is evident that the majority of patients from the traditional settlements and mine villages use government medical facilities. Traditional medicines are reported to be widely used, particularly in the traditional villages.

The household survey explored the occurrence of major illness among households during 2003. The survey results largely confirm District epidemiology, with malaria by far the common disease, and

the major cause of death among both adults and children. Measles is a significant disease among children, accounting for many fatalities. There is little difference between the surveyed communities regarding major illnesses. The reported ailment (for example “stomach ache”, “cough”) may be a symptom of something else (such as diarrhoea or bronchitis). The following ailments were reported:

- Traditional Villages: malaria, measles, “stomach ache”, anaemia, dehydration, diarrhoea, hypertension (blood pressure), “cough”, asthma, bronchitis, cysts, pre-natal problems, pneumonia. Key causes of death (where reported) were the following: malaria, “anaemia” and measles.
- Mine Villages: malaria, measles, anaemia, epilepsy, diabetes, sinusitis, “stomach ache”, “cough”, tumour, heart disease, pre-natal problems, hypertension. Causes of death were reported as follows: malaria, “maladie” (disease), accident, measles, malnutrition and diarrhoea.
- Tshala Village: malaria, anemia, dehydration, hypertension, rheumatism, pre-natal problems. Reported causes of death were: still born infants and old age.

The general level of awareness of health issues in the project impacted area is unknown Ministry of Health uses local radio stations for health education programmes. These stations are potentially a useful tool for more extensive health campaigns, and for other community development initiatives.

6.8.4 Housing

The project impacted area has a broad spread of housing types and conditions of tenure. In the traditional villages, housing usually comprises mud brick structures with a variety of roofing materials. Some sites have more than one structure, with additional structures used for cooking, accommodation and personal hygiene. Housing in Kolwezi proper is mixed, but many dwellings are substantial, having been constructed for use by mine management and senior officials. Housing in outlying mine villages such as Luilu, Musonoi and UZK is more modest, designed to house less senior staff. The household survey confirms the overall housing picture (see Table 6.6 below).

Table 6.6: Housing Characteristics among Surveyed Households

Housing Characteristic	Settlement		
	Traditional Villages	Tshala Village	Mine Villages
House Type			
Modern Substantial	9%	0%	7%
Modern Modest	19%	31%	79%
Rural Traditional	69%	69%	14%
Other	3%	0%	0%
House Condition			
Good	19%	31%	72%
Poor but Usable	66%	62%	28%
Unusable - repairable	9%	0%	0%
In Ruins	6%	8%	0%
Tenure			

Owner	94%	92%	48%
Tenant - renting	0%	8%	28%
Tenant – no rent	6%	0%	24%

Note: Due to rounding errors, some totals exceed 100%

Most houses in the traditional village sample (Samukonga, Kipepa, Ndzama, and Kamimbi) are owned. The majority are in various states of disrepair. Tenant households in these areas do not pay rent, and are probably related to the owners. In Tshala Village, house condition and tenure profiles are similar to those of the traditional villages, but with more houses in good condition and with some rent-paying tenants. Houses in the mine village sample (Luilu, UZK) are predominantly in good condition. Ownership is less common than in the traditional villages.

6.8.5 Basic Services

Water

In 2004 there were three water supply systems in the project impacted area:

- Piped water distributed to areas of Kolwezi proper (including Manika, Dilala, Kasulo, Mutoshi, Mutoshi Industrial and the airport) by state corporation REGIDESO. The bulk water is purchased from Gécamines.
- Piped water distributed by Gécamines to mine villages including Musonoi, Luilu, and UZK.
- Boreholes and wells in the traditional villages.

Two major sources supplied the two piped networks: a borehole at Nyoka (close to the KOV open pit); and a borehole near the Mutoshi open pit. Water from the former supplied Gécamines mine villages, and was treated by REGIDESO for distribution in the central enclaves of Kolwezi. Water from the latter was untreated, and was distributed to outlying areas such as Kasulo. Since 2004 several elements of the broad water distribution system have failed. Some of the mining companies are investigating community water supply initiatives linked to their dewatering and water management programmes.

Most of the water distributed by REGIDESO is metered, and sliding tariffs are levied on different user categories: community standpipes, social services, domestic users, commercial users and industrial users. Many users default on payments, and REGIDESO struggles to sustain adequate operation and maintenance activities. Supply is thus intermittent in areas served by REGIDESO. Most of the surveyed households extract water from wells. This is the case in the traditional villages, in Tshala Village, and among many respondents in Luilu. Some of the Luilu interviews took place in the extensions of Sapatelo and Tshamudende, where water connections may be faulty or non-existent.

In the concession area and especially in the traditional villages there are no protected water sources. Several open sources exist in Samukonga, Samukinda and Tshala. In addition, several traditional wells are being used in Kisangama, Samukinda, Kamimbi, Tshala and Tshamudende. (PACT, 2008)

Water use along the Lulu River was investigated in some detail. In general, people living and working in the vicinity of the river avoid using the water because of its history of contamination.

Energy

The *Société Nationale d'Electricité* (SNEL) distributes electricity in the project impacted area. There is no formal supply to the traditional villages. Gécamines purchases electricity from SNEL for distribution to its mine villages and plants, and SNEL supplies electricity directly to users in Kolwezi proper. Billing and cost recovery is reportedly difficult in Kolwezi, with bills frequently contested by users (Office of the Mayor, 2003). Electricity supply is sometimes intermittent, due to an aging distribution network, limited resources for preventative maintenance; excess load on elements of the network, faulty cables, and deterioration of transformers.

There is one petrol station in Kolwezi. Vendors also sell petrol and diesel in plastic containers at the side of the road, and large users transport fuel in bulk from Lubumbashi.

Among interviewed households the following energy use patterns are evident:

- In the traditional villages the major source of heating energy is wood (collected and in some cases bought), and lighting is usually provided by candles.
- Energy use patterns in Tshala resemble those of the traditional villages. Apart from wood, use of gas / kerosene for cooking is reported.
- Most UZK respondents use electricity for lighting and heating. Some use of charcoal and wood is evident. In Lulu the majority of surveyed households do not use electricity. The reason is unclear, but it is likely that the enclaves of Sapatelo and Tshamudende are not fully reticulated. In households that do not use electricity, sources of energy are similar to those in Tshala and the traditional villages.

Roads and Paths

Most national roads in the District of Kolwezi are reported to be in poor condition. The Kolwezi – Likasi road has been upgraded in places, with contributions by mining companies along the route. The poor district road infrastructure increases travel times and costs, and hence the costs of imported goods and services. Rail and air links are good.

Most non-urban roads in the project impacted area are poor including formerly paved routes. Urban roads are in variable condition, with many showing potholes and the break-up of paved surfaces (where these occur). The Office of the Mayor has identified some 18 road repair and rehabilitation projects in urban Dilala and Manika (Office of the Mayor, 2006). No maintenance or improvement took place in 2006. The greater Kolwezi mining area has a number of roads associated with mining and processing activities of the privately-owned mines and of Gécamines. The condition of these varies, but many have been upgraded to enable construction and mining activities. In many respects the best roads in greater Kolwezi town are those operated and maintained by the mines. The concession area is also crisscrossed by tracks and footpaths linking settlements to places of work, other settlements and fields.

The project affected area (plant and tailings dam sites) is characterized by narrow vehicle tracks and paths for pedestrians. These are associated almost exclusively with the fields worked by residents from nearby settlements. The KMT project has cleared areas in the plant and accommodation footprint areas. Where fields and crops have been affected, compensation has been paid in the framework of an agreed Interim Resettlement Action Plan. Traffic during the construction phase as well as during the operation of the mine will have a substantial effect on the surrounding communities. Routes critical to KMT operations have been upgraded.

Communication

Urban enclaves in the Project Impacted Area are served by two fixed-line telecommunication networks. OCPT is reported to be in a poor state and in urgent need of rehabilitation. The SOGETEL network is more reliable. Three mobile networks (CELTEL, VODACOM and CCT) have extended coverage to Kolwezi since 2002. These systems are effective regionally and nationally, and have the potential to make telecommunications accessible to rural communities. Apart from two stations relaying television programmes, Kolwezi also has several private radio stations (Office of the Mayor, 2004, 2006).

6.9 Local Economy

6.9.1 Overview

Prior to the present mining revival the economy of the project impacted area had been damaged by events largely beyond the control of local stakeholders. These included sporadic civil unrest, the erosion of foreign investment and development support, and the dramatic decline of the region's primary employer, Gécamines. Many businesses associated with Gécamines failed (e.g. transport company SOCOCOT), amplifying the impact of the Gécamines implosion. In this context unemployment became pervasive (estimated at 90% by the Ministry of Labour) and poverty was widespread. Gécamines has remained a notable local employer, but many former staff has been laid off through the restructuring initiative facilitated by the World Bank. Prior to that many Gécamines employees were paid irregularly, if at all. Although for these people, employment was nominal, and they faced, in effect, the challenges of unemployment.

With four internationally listed mining companies and several private, medium scale companies currently operating or establishing operations in Kolwezi, and with several other large companies exploring possibilities in the region, opportunities for an economic and social renaissance seem to be present. The legacy of unemployment and underdevelopment remains, however, and many factors could negatively impact the possibility of responsible and sustainable development for the larger communal good. Among these factors is a force of around 30 000 artisanal miners operating illegally in the Kolwezi area, this fluid and largely uncontrolled group presents a major risk to sustainable economic recovery. (PACT CONGO, December 2007). The weakness of mechanisms of economic redistribution is another serious risk.

6.9.2 Sectors of Employment and Sources of Income

In the current economically depressed environment key, sectors of employment are mining and agriculture. These were prominent in better times, with employment in formal mining increasing again. Both sectors are, however, characterised by substantial informal small-scale activities. There are some players in the two sectors who make a good living, but these are rare. For most participants basic livelihoods are at stake. Other important sectors of employment include industry, commerce, informal trading and the public sector. Two banks operate in Kolwezi, but finance for business development is difficult to secure. In all areas, some incomes are derived from social security arrangements and severance benefits (especially from Gécamines).

6.9.3 Mining

Over a period of several years, Gécamines has been supported by the World Bank to implement a restructuring and recapitalisation programme, including worker redundancy. Workers have been assisted to secure early retirement, with the assistance package including severance payments as well as training in business and other topics. This programme has been assisted by NGOs such as the *Bureau Diocésain de Développement*. The restructuring and recapitalisation programme is well advanced, with a minority of the former Gécamines workforce finding their way into the new Kolwezi mining ventures (where Gécamines is usually a minority partner).

Against the background of significant planning of mine works and infrastructure around Kolwezi, limited but increasing formal mining and processing activity is currently taking place. Anvil Mining is mining actively, while Katanga Mining (formed through a merger of Katanga and Nikanor/DCP) is mining and processing on a limited scale. With increased modern plant capacity likely to be in place over the next several years (at Katanga and KMT), mining and especially processing will grow significantly.

The new mines have already secured a significant combined workforce, with significant expatriate representation in the planning and early construction phases. Major construction at Katanga Mining and at KMT will see a spike in construction employment in the short to medium term.

Artisanal Mining

By far the most prevalent mining activity in the project impacted area is artisanal (informal, itinerant) mining. The major product is heterogenite (cobalt oxide). This industry-within-an-industry employs many thousands of diggers and traders³, and is a major contributor to the overall economy of Kolwezi and (to a lesser extent) its rural environs. It is also a key source of livelihood for many households in the project impacted area.

Artisanal mining activity has grown following the decline of Gécamines. It has proceeded with government approval as a “social calming” strategy to deal with the effects of the near cessation of formal mining. The sector is largely unregulated. Gécamines has agreements with buyers (*Maisons*),

³ 6000-10 500 diggers and traders (different information sources) were registered with EMAK in 2004. Emak is an umbrella organization for artisanal mining (see Section 6.10.2). There is no accurate information on the numbers of artisanal miners active in Kolwezi District, but estimates go as high as 30 000.

and the artisanal mining “union” EMAK registers and provides limited support to miners and agents. The Ministry of Mines established SAESSCAM (Service d’Assistance et d’Encadrement du Small Scale Mining) to organize and develop the small scale and artisanal mining. SAESSCAM is active in Kolwezi, but with limited capacity.

Several of the *Maisons* are substantial DRC- registered companies. The larger *Maisons* are Basano, Chemaf, Somika and Forrest. Bazano is reportedly withdrawing from informal mining, but the extent and nature of this withdrawal is not clear. At the time of the 2004 social assessment there were 8-9 companies buying heterogenite in and around Kolwezi. Before and after 2004 this trade has waxed and waned as a result of fluctuating cobalt prices on the world market. Prices have been peaking since 2003, and moved up to around US\$40.25 per pound at the end of 2007. Any big dip in the market would curtail the activities of the *Maisons*, with near immediate effect on the diggers. Hence the sector is extremely fluid, making organization and regulation difficult.

Artisanal mining in the project impacted area takes place largely in the area around UZK Village and the Kingamyambo tailings dam. There are two major groupings of artisanal miners operating on the concession area. The first, a small and highly organised mining operation on the tailings dam has been active for some years. The second artisanal grouping comprises roughly 300 artisanal miners who have established themselves along the side of the road near the main Gécamines entrance. These artisans are apparently working for a large Gécamines and Chemaf-aligned trader in town. Most currently active artisanal miners cited Tshala, Tshamudende and UZK as their place of residence. (PACT KMT project proposal, February 2008).

There are no longer any large operational cobalt markets on the KMT concession. Artisanal mining is a hierarchical business, involving *creuseurs* (diggers); *négociants* (agents); and *Maisons*. Diggers are often supervised by employees of the *négociants*, who ensure that ore is not sold elsewhere. The number of artisanal miners actively working sites in the project concession area is highly variable. Possible removal of these miners from the area could be seen as economic displacement under IFC guidelines, implying resettlement assistance obligations.

It is difficult to quantify the contribution artisanal mining makes to households and to the economy in the project impacted area, but it is clear that it is substantial. It was reported in 2004 that *Maisons* paid *négociants* an average of USD 160 per tonne of ore (at a grade of 5%), and that they in turn paid diggers around 70 USD. Digger earnings probably differed widely, but a rural village informant estimated daily earnings at 200-500 Congo Franc (0.4 – 1.0 USD). Based on informal observation, digger earnings in 2008 are believed to be in the range of USD 2 to USD 5 per day.

A key feature of artisanal mining and “stone picking” is the important role it plays in livelihoods and household survival strategies throughout the Project Impacted Area. Around 34% of the sampled households in the household survey reported mining and “stone picking” as a source of income. In UZK and Tshala, the proportions were higher, at 47% and 54% respectively.

6.9.4 Agriculture

Overview

There is little formal commercial agriculture in the Project Impacted Area. A significant proportion of the commercially grown produce and meat products sold in Kolwezi come from other districts (e.g. Lualaba District). Soils are reportedly poor, requiring regular use of fertilizer. On the other hand, small scale low intensity agriculture is very common. The project impacted area is dotted with small fields worked by residents of rural villages, mine villages and Kolwezi town itself. The predominant crop is cassava. Goats and chickens are common, especially in the traditional villages. Agricultural production figures for Kolwezi District are presented below.

Table 6.7: Agricultural Production over three Seasons – Kolwezi District (in Tonnes)

Product	2000-2001	2001-2002	2002-2003
Cassava	194 200	99 375	159 313
Maize	29 028	23 964	53 223
Groundnuts	3 574	2 763	6 080
Beans	9 242	7 734	14 509
Soya beans	172	232	1 126
Potatoes	4 483	4 938	29 255
Sweet potatoes	134 451	22 663	21 074
Onions	1 064	1 170	338
Rice	23	20	148

Source: Ministry of Agriculture

The Ministry of Agriculture has a framework for agricultural extension and support, including a group of agronomists who are meant to be active at village level. Only 40 out of 112 posts at this level were reportedly filled in 2004 (for the whole Kolwezi District), and evidence from the traditional villages in the project impacted area suggested that the existing agronomists had had limited impact.

Subsistence Agriculture

Small-scale low intensity agriculture is ubiquitous in the project impacted area. Given the ongoing impoverishment of most households in the Kolwezi area, this type of agriculture is critical to livelihoods in rural areas and in mine villages such as UZK and Luilu. In the latter, many people have been forced into sustaining livelihoods through agriculture as a result of unemployment and retrenchments at Gécamines. The typical agricultural system is itinerant with long periods of fallow (requiring large areas of land), and cassava and other fields are not always well maintained. Soil degradation is a problem associated with monoculture agricultural practices. Market gardening is practiced in the dambo west of the Musonoi River (in the Project Concession Area), and in some of the Musonoi tributaries (for example close to Mwange Dam, also in the project concession area). See Livelihoods in Section 6.11.

6.9.5 Industry and Commerce

Overview

Besides mining, there are few industrial enterprises in the project impacted area. Commercial activities are spatially widespread, ranging from formal retail and service businesses to community markets located in most of the larger settlements. The markets support a wide network of formal and informal suppliers, and are a major outlet for products from small farmers in the rural areas of the project impacted area. There are also many informal traders operating outside the community markets.

Industry

According to the Office of the Mayor, the following mining and mining-related companies were active in the project area in 2006: GCM/O, Groupe Banzano, Societe Miniere de Kolwezi, CCC, DCP (Nikanor), KOL (Katanga Mining), COMETCO, CHEMAF, SOMIKA, MCK, Katanga Metal, KMT, de Moura, Plat Mines, KMC, TDK, NOMINET, TFM, Swaminine, COMIDE, Mumi Mining, Kansuki Mining, Geosearch, and Geoquest. The most important non-mining industries in and around the project impacted area are the state water and power corporations (REGIDESO and SNEL) which have been experiencing serious financial difficulties in the prevailing economic slump (Office of the Mayor, 2006).

Formal Commerce

Dilala has the biggest concentration of commercial enterprise in the Project Impacted Area. According to 2003 figures from the Office of the Mayor, 22 major firms (undefined) and 170 registered traders were located in Dilala. In Manika and Mutshatsha the figures were 8 / 21 and 7 / 7 respectively (Office of the Mayor, 2003). For the ESIA-led social assessment a survey of businesses in the CBD (Central Business District) was undertaken. Food and clothing retailers predominated, with several medicine suppliers and general dealers. The staffing of the CBD enterprises was not addressed, but most appeared to be small (3-6 staff). With some bigger businesses among them (for example the hotel) the 84 businesses included in the survey were estimated to employ 400-600 people. Nine of the surveyed enterprises were examined in more detail. Key findings were:

- Goods were almost exclusively sourced outside Kolwezi. The primary sources were: Lubumbashi for processed foods, general household goods and petroleum products; Lubumbashi and Kinshasa for medicines and liquor; the above and Dubai for clothing; and South Africa for motor related goods and office equipment.
- Most traders had found the past ten years difficult, citing currency and political instability, and local insecurity. Almost all perceived an upturn. Key drivers for the upturn were seen to be stability of the local currency, payments to Gécamines staff (salaries and severance packages), and the growth of artisanal mining.

At the time of the original social assessment (2004) most general traders had felt the pinch of a depressed economy, and some more specialized enterprises had failed completely. The construction business was reputed to be largely dormant, and some mine linked operations had gone bankrupt (FEC, undated). Two banks had remained in business in Kolwezi (Banque Centrale du Congo and

the Kolwezi Agency of Union des Banques du Congo). The savings bank CADECO (Caisse d'Épargne du Congo) was experiencing serious financial difficulties, due to high unemployment among its worker client base (Office of the Mayor, 2003).

By 2008, trading conditions had improved for many wholesalers, retailers and service providers. The recovery is still in its early phases, and many small businesses are likely still to be marginal. Bigger traders such as Roffe Congo (a broad-based general dealership) are reportedly booming, especially in the markets serving the mining companies and their expatriate staff.

In 2008; it was reported that growing demand for goods and services has begun to manifest itself in rising prices. Among the drivers of these price increases were increased residential and business rentals and increased transport costs.

Informal Trading and Subsistence Activities

Beyond agriculture and artisanal mining, small scale economic activities in the villages in the project impacted area include charcoal production and sale, bakeries, hair saloons, knitting and small kiosks (PACT, January 2008)

There is insufficient information to compare formal and informal trading as sources of income. Whilst participants in formal trading may earn more per capita (unconfirmed), there is no doubt that informal activities provide a much larger population with some form of income. Much of the trading in the project impacted area takes place in produce markets. It is not correct to refer to this as informal trading, because local government regulates most of the markets. Traders pay for the use of stalls, and the income goes to the Office of the Mayor. The Mayor's office has identified the upgrading of selected markets as a development priority. The distribution of produce markets in 2003 is given in Table 6.8 below.

Table 6.8: Local Markets in Kolwezi District

Area	Number
Manika	7
Dilala	5
Lubudi	9
Mutshatsha	5

Source: Office of the Mayor, 2003

A survey of two produce markets was undertaken in the context of the social assessment. The surveyed markets were INGA in the Mutoshi industrial area, and the main market in Manika. The latter is the largest market in the project impacted area. Many of the staple foodstuffs were sourced locally (cassava, sweet potatoes, groundnuts), whilst others (beans, tomatoes) came from elsewhere in the district, or even from other districts (especially Lualaba). Most processed foodstuffs, clothing and household goods came from dealers in Kolwezi. There was thus a close relationship between formal and informal trade.

Apart from trading that takes place in the markets, street trading is also common. Many of the goods found in the markets are also available from street side traders and hawkers. Some hawkers sell curios (including items carved from wood and malachite) to visitors.

6.9.6 Public Sector

Against the background of widespread unemployment, the public sector remains a major employer in the Kolwezi District and in the project impacted area. The District employment is found in four major groups of institutions:

- District Administration – including the Office of the Mayor, and the staffing of the *Territoire, Communes, Secteurs* and *Groupement*. The state does not pay salaries below *Groupement* level.
- Army and police.
- Local offices of line ministries – including health, education, labour, mining, transport and communication and energy.
- Parastatals – including REGIDESO and SNEL.

No information on salaries or on the reliability of state remuneration was found, but it is reasonable to assume that the contribution of the state to the local economy is significant.

6.9.7 Social Security and Severance Benefits

The labour ministry has a branch dealing with social planning and security (Prévoyance Sociale). A key role of the branch is that of ensuring that employers comply with labour policy and law in respect of benefits and social security. The extent to which social security contributions are collected and paid was not determined during the survey, but it is assumed that only formally registered enterprises are likely to comply with social security requirements. Hence whilst employees and former employees of formal organizations may have received severance packages and pensions, this group is probably a small minority in the project impacted area context.

Severance and other payments have been made to former Gécamines employees through the World Bank funded redundancy programme. Payments were reportedly in US Dollars, and the impacts in the local economy have been marked, with local businesses citing these payments as one element of the recent economic upturn.

6.10 Business and Labour Organisations

6.10.1 FEC

The Fédération des Entreprises du Congo (FEC) is a government body linked to the economic affairs ministry. It performs some of the functions of a Chamber of Commerce, but a key role is that of guiding businesses (especially those newly established) through a plethora of legal and administrative procedures. FEC has 74 members, including some of the major mining houses

(Bazano, Chemaf etc.), the brewery, and a variety of retail operations and hotels. The state enterprises REGIDESO and SNEL are not members.

6.10.2 EMAK

EMAK is a state-sanctioned organization focused on supporting and to some extent regulating small scale, manual mining. It has a permit for artisanal exploitation, and is not bound by state labour regulations. It is also not linked to any trade unions. The relative autonomy of EMAK stems in part from its role in the “social calming” and employment creation policy that has emerged since the failure of Gécamines. As has been shown elsewhere in this report artisanal mining has become one of the cornerstones of both the formal and informal economies of the District, and particularly of the project impacted area.

EMAK had a membership of 6000 – 10500 in 2004 (from different sources), including both diggers and *négociants*. The members receive some benefits, including counselling on financial management, advice on safety and social security, and assistance with funds for events like funerals. The head office of the organization is in Lubumbashi.

6.10.3 CMKK

The ‘Cooperative Minière du Katanga’ is a competing mining cooperative active in Kolwezi.

6.10.4 SAESSCAM

Le Service d’ Assistance et d’Encadrement du Small Scale Mining is the department of the Ministry of Mines responsible for technical support to artisanal miners. SAESSCAM also has a delegation in Kolwezi. Most artisanal mining sites have a SAESSCAM representative on site, although their role and responsibility is not always clear.

Organizational and institutional conflict between different cooperatives and institutions working for/with artisanal miners seems to be one of the most critical barriers towards the organization of the artisanal sector. The competition over membership or beneficiaries renders none of the organizations currently active in Kolwezi capable of serving its constituency. (PACT Congo, 2007)

6.11 Livelihoods in the Project Impacted Area

6.11.1 Context

It is clear that residents in the project impacted area have to deal with a depressed local economy and few opportunities for formal employment. Superimposed is a large rural (and peri-urban) population that would have limited access to anything but basic employment under any circumstances, due to illiteracy, limited education and few marketable skills. The failure of Gécamines and various disruptive events have severely eroded jobs, but even in better times there would have been a substantial group finding livelihoods in a variety of subsistence activities.

The following section explores livelihoods in the project impacted area through the lens of the household survey. So whereas Section 6.9 looked at the local economy and sources of income in

broad terms, the discussion that follows seeks to develop an understanding of the actions taken at household level to live and survive in and around Kolwezi.

6.11.2 Sources of Livelihood and Income – Household Survey

In general, households in the surveyed communities have multiple sources of livelihood. This is in part a reflection of the presence of several potential income earners in many households (larger households would tend to have more income earners). It also has roots in the overall poverty of the rural areas surrounding Kolwezi, and in the depressed state of the economy of Kolwezi town. The range of livelihood sources in the surveyed communities is as follows:

- **Traditional Villages (Kamimbi, Ndzama, Kipepa, and Samukonga):** Agriculture is the predominant source of livelihood in these communities. Products are sold to secure cash income, and are also produced for household consumption. The most common crops are cassava, sweet potatoes and Irish potatoes. Other products sold (and consumed) are sugar cane, maize, fruit (e.g. mangoes), groundnuts, tomatoes and onions. Many households raise and sell goats and chickens. Non-agricultural sources of livelihood are varied. These include the collection of mineral-bearing rocks such as heterogenite (“stone picking” or “hand picking”) and the production and sale of charcoal.
- **Mine Villages (Luilu, UZK):** Agriculture is also an important source of livelihood in the mine villages. This shows the diversification of income earning activities in former mining communities following the failure of Gécamines. The range of products sold and consumed is similar to that of the traditional villages. A significant difference between the villages and the mine enclaves is the relatively greater importance of “stone picking” and artisanal mining as a source of livelihood in UZK. For many households these activities far outweigh other livelihood sources. Charcoal production is common in UZK and Luilu, but there is also a greater variety of non-agricultural activity than in the villages. These include knitwear, cooking and sale of food, the production and sale of alcoholic beverages, the sale of fish, and the operation of services such as basic health care and sale of medicines. The wider range of activities may be a result of better access to markets in and around Kolwezi town. Some people in UZK and Luilu are salaried employees, and there are some who receive pensions.
- **Tshala Village:** The profile of income earning activities in Tshala resembles that of UZK and Luilu.

6.11.3 Monetary and Non-Monetary Income

The household survey made a distinction between monetary and non-monetary income. Non-monetary income is important because it measures production and activity that serves the household and the community without exchange of cash. Subsistence production and household consumption of food crops is accounted for under non-monetary income. The average annual monetary and non-monetary income of sampled households is summarized in the Table 6.9 below:

Table 6.9: Average Annual Household Income

Community	Monetary Income		Non-Monetary Income	
	Congo Francs	US Dollars	Congo Francs	US Dollars
Kamimbi	386 158	772	231 399	463
Ndanzama	270 650	541	263 188	526
Kipepa	211 407	423	167 714	335
Samukonga	271 092	542	147 690	295
Luilu	592 915	1186	152 526	305
UZK	800 324	1601	188 973	378
Tshala	990 296	1981	280 875	561

In general, monetary incomes are higher in Tshala and the mine villages than in the traditional villages. However, even the highest average household income level is low in comparison with international norms. The highest average annual incomes are recorded in Tshala. Even here, with an average household size around 7.4, the per capita cash income for surveyed households is significantly less than one US Dollar per day (0.73). Combined monetary and non-monetary income among surveyed households in Tshala amounts to 0.94 US Dollar per capita per day. An income less than one Dollar per day is generally accepted to define the poverty datum line.

Non-monetary incomes vary less than monetary incomes among the surveyed communities. The significance of the non-monetary income is that households in all of the selected villages and mine villages engage in activities directed to household and community subsistence and survival.

6.11.4 Expenditure

There is no clear difference in the patterns of annual household expenditure among settlements in the household survey. In the mine villages some households pay rent. Average household expenditure per annum, by settlement, is given in table 6.10 below.

Table 6.10: Average Annual Household Expenditure

Community	Congo Francs	US Dollars
Kamimbi	293 051	586
Ndanzama	197 550	395
Kipepa	207 692	415
Samukonga	212 139	424
Luilu	437 007	874
UZK	418 450	837
Tshala	447 697	895

In line with incomes, expenditures are higher in Tshala and the mine villages than in the traditional settlements. These figures are based on rough estimates by respondents, but it is significant to note that across settlements, expenditure is much less than one US Dollar per capita per day.

6.11.5 Livelihood Strategies and Land

With few economic opportunities, most households have had to pursue a spread of activities to secure their livelihoods. This is a risk management strategy which typically secures meagre incomes, but which provides alternatives should one source fail. Within the household livelihood strategies, small scale agriculture is almost ubiquitous. All but four sampled households have access to fields (most secured through the *Chef de terre*), and some have several fields.

Table 6.11: Average Number of Fields per Household

Settlement	Fields
Kamimbi	2.1
Ndanzama	3.3
Kipepa	2.1
Samukonga	2.0
Luilu	1.4
UZK	1.2
Tshala	2.0

In general, households in the traditional villages and Tshala use more fields, but a key conclusion is that any activity that alienates fields in the vicinity of the sampled settlements has the potential to adversely affect livelihoods in most of them.

6.12 Social Dynamics

6.12.1 NGOs, CBOs, Culture and Recreation

Numerous NGOs operate in the project impacted area. The NGOs are both international (e.g. World Vision, PACT Congo) and local. Most of the local organisations suffer from lack of organisational capacity and funds. There are several organizations seeking to coordinate NGO activities, among them the CRONGD network. The NGO activities are wide-ranging (see Table 6.10 below).

Table 6.10: Overview of local and international NGOs in and Around Kolwezi (2004)

Name	Activities	Focus Area	Size
World Vision	International Nutrition Animal breeding Technical assistance to farming Support to immunization Support to health institutions Basic medicines Wellbeing of children Micro credit	DRC	Information required
World Food Programme	International Emergency food supply	DRC	Information required
UNICEF	International Medical supplies Establishment schools and clinics Counselling conflict victims Polio immunisation	DRC	Information required
PACT Congo	International Capacity building local organizations Separated and abandoned children Market approaches to livelihoods	Katanga Province, including Kolwezi District	Work through partner NGOs. About 10 staff
BDD. Bureau Diocesain Pour Développement	CBO Multisectoral. Coordinating. Oversees the CRONGD network in Kolwezi. Participated in the World Bank funded Gécamines restructuring programme	Kolwezi diocese area (60 km radius)	7 staff
Eco-Dev. Action Pour l' Eco- Développement	CBO Women, families and children Civic education Cleaning the environment	Kolwezi, Kazembe, Musompo	7 staff 30 volunteers
PCI-Rayon. Prise en Charge Integrale Rayon	CBO Health care AIDS victims	Manika	Information required
ARDERI. Association Régionale Pour le Développement Rural Intégré	CBO Rural development Providing water in villages	information required	Information required
BDOM. Bureau Diocesain Pour les Services Medicaux	CBO Providing medicines to parish pharmacies	Diocese of Kolwezi	Information required
Maison WENGI	CBO Orphans Street children	Unknown	Information required
Maison BUMI	CBO Support to children	Information required	Information required

Name	Activities	Focus Area	Size
Jeunes Pour le Bien Etre Commun	CBO Youth Improving quality of life	Kasulo	30 members
ABC. Associes Pour Bien Commun	CBO Food production Improving quality of life	Kolwezi	30 members
IDK. Initiatives Pour le Développement	CBO Food production Improving quality of life	Kasulo	30members
COOPAGRIS. Coopérative Agricole de Solidarité	CBO Agriculture Food production Improving quality of life	Kolwezi	20 members
Centre des Personnes Handicapées	CBO Handicapped persons Fund raising activities	Kolwezi	45 members
Association des Femmes Congolaises Pour le Développement Agricole	CBO Women in agriculture Food production Improving quality of life	Kolwezi	20 members
Union des Cultivateurs de Kasulo	CBO Food production Improving quality of life	Kasulo	25 members
Associations Féminines (11)	savings clubs Women Fund raising activities for members	UZK, Luilu, Tshala	Collectively – 220 members
Atelier Rapide de Couture	SME Clothing Improving quality of life	Kolwezi	10 members
Association AFIA	CBO Household agricultural assistance Medicine (cough syrup) Literacy	Kolwezi, Kasulo, Katembe	18 members
AMKO (mostly former Gécamines employees)	Cooperative Wood processing Rearing goats and chickens Fish farming Health services Centre for women (making clothes) Heterogenite mining	Kolwezi and villages	97 members
ASEMIR. Association pour la Scolarisation des Enfants au Milieu Rural (former Gécamines employees)	Heterogenite mining Assistance to children affected by war	Kolwezi and surrounds	Information required
SODICOM (former Gécamines employees)	Further information required	Kolwezi and surrounds	Information required

Name	Activities	Focus Area	Size
SATA. Service Agricole et Transport Association (former Gécamines employees)	Further information required	Kolwezi and surrounds	Information required
SATEERA (former Gécamines employees)	Technical support (eg. motor mechanics)	Kolwezi and surrounds	Information required
URK Network. GAPAT, AMKO, MAISHA	GAPAT supports agro-pastoral activities. Further information on others required	Kolwezi and surrounds	Information required

Note: This table is based on contacts with NGO informants in the Kolwezi District. The information pertains to 2004, and the list is not necessarily complete. Some NGO details were not available at the time of the survey.

The extensive community of NGOs is in part a symptom of the difficulties faced by communities in a depressed economic and social environment. In many situations, the NGOs are filling gaps left by poorly resourced state institutions. For the most part the NGOs themselves are not rich, but they are potentially a vehicle for the facilitation of socio-economic development in future.

Many churches are active in the project impacted area. Major denominations include Catholic, Methodist and Lutheran. There are however many other groups, including very active evangelical congregations. Several churches are active in education, and numerous NGOs have associations with particular denominations.

The Mayor's Office has recorded many artists, art studios and centres of culture (including 8 libraries, 12 theatres, 18 cinemas and 20 discotheques. There are also facilities for athletics (2), football (31), basketball (20), handball (4), volleyball (12), tennis (10), rugby (1) and gymnastics (1) (Office of the Mayor, 2006).

6.12.2 Extra- District Relationships

The people of Kolwezi District have had to deal with a series of damaging events with origins outside the district. An example is the expulsion of people from Kasai Province in 1994, sponsored by the Mobutu regime as a result of the Mobutu – Tshisekedi power struggle. It was felt that Kasai dominated positions of power in Katanga and Kolwezi District, and the expulsions flowed from this point of conflict. In the struggle for scarce resources and jobs, the Katanga-Kasai schism is still a source of tension and potential conflict in the area.

Sporadic civil war continues in the east of the DRC, despite efforts to secure peace. The war is not a direct threat to Kolwezi District, but unregulated access to weapons remains a problem in the district (Office of the Mayor, 2006). In the economic sphere, Kolwezi District and surrounding areas are interdependent. Many of the consumer goods sold in Kolwezi originate in other districts (or even outside the DRC), and Kolwezi products such as heterogenite are sold elsewhere. The economic links with other districts are impeded by poor access (especially by road) to Kolwezi District. Improving this situation has been a regional economic priority for the past several years.

6.12.3 Intra-District Relationships

There is no evidence of overt intra-district conflict in and around contemporary Kolwezi. Some informants see widespread unemployment and poverty as a possible source of conflict, held in check by the “social calming” policy based on artisanal mining. In this context, some commentators have warned against actions that restrict access to artisanal mining opportunities.

New developments have the potential to promote tensions if their impacts are not well managed. The demand for jobs is so high that any perception of preference or bias in recruitment may build resentment in the group that feels excluded. Hence an emphasis on employing former Gécamines personnel might upset non-Gécamines elements of the population. Similarly, the employment of “townspeople” might promote a sense of marginalisation in the rural areas.

The traditional leadership system is essentially patriarchal. Traditional chiefs are men, and gender roles are sometimes very clearly defined. When people in the traditional villages considered the opportunities that might arise from KMT, expressed priorities emphasized jobs for the men and broad development support for women. Women are however empowered in some ways: they have access to land in their own right, and they are prominent in the organization and operation of NGOs and community-based organizations.

The modern and tribal elements of local government appear to link effectively. Traditional leaders retain community powerbases, reinforced by the right to allocate land, and the institutional system permits the coexistence of traditional and state structures. Both sets of structures lack resources, but an effective framework for local development is largely in place.

6.12.4 Vulnerable Groups

There are several vulnerable groups in the project impacted area:

- **Children and Youth:** Many children and youth in the projected impacted area do not attend school, or attend intermittently. Poverty is one of the drivers, with children often involved in income earning activities. In this context, the opening up of artisanal mining is both a benefit and a problem. It is estimated that about 4000 children in and around Kolwezi are involved in artisanal mining operations. (PACT Congo, 2007) It provides an alternative income source for households, but it draws children and youth into a harsh and relatively uncontrolled working environment. NGOs and churches have expressed fears regarding the exploitation of children in this context, citing the dangers of life in a “digging culture”. Apart from physical risks, one of the dangers identified is the spread of sexually transmitted diseases including HIV/AIDS. Abandoned and orphaned children are particularly vulnerable. Some of these may also be involved in artisanal mining, and many become street children.
- **Women:** Among women, groups requiring particular support are single mothers, rural women and widows. In all three cases, the women often find themselves caring for a household whilst also seeking to provide a living for them.

- **Elderly:** The household survey reveals many elderly people living with their families (fathers, mothers, aunts and uncles). Supporting elderly dependents is certainly a challenge to poor households, but the old people mostly at risk are those without support.
- **Disabled and Chronically Ill:** Again, there are many examples of disabled and chronically ill people being supported by their families. Those at risk are mostly outside this support system.

Overall, the key institutions caring for vulnerable groups are families, NGOs and churches. The state has structures to provide support (for example Affaires Social), but these have very limited resources. There are two hospices (in Manika and Mutshatsha), and a small home for the elderly. There is no orphanage in Kolwezi.

6.13 Perceptions and Expectations

6.13.1 Review of Expectations

It is inevitable that an initiative like KMT will generate local expectations. Evidence from the social assessment suggests that the ESIA Public Consultation and Disclosure Programme (PCDP) has been successful in moderating expectations. However, partly due to the temporary halt in activities and community engagement after the 2006 PCDP, a significant level of frustration among communities exists, mainly because of ‘unmet promises’ from the three major mining companies operating in the area. (PACT Congo, 2008) The following hopes and fears remain evident:

- Priority for employment opportunities for village residents closest to the mine operations and within the concession
- Water pollution from the tailings dam, and negative effects on livestock. This fear is prominent in the Samukonga community, who will have to be resettled because the proposed KMT tailings dam is too close to their settlement.
- Noise disruptions have been experienced during the current construction phase by residents of Samukonga village (PACT Congo Jan 2008)
- KMT as a social provider. The consultation programme has made it clear that KMT will not be a paternalistic provider in the mould of Gécamines. However, there is still an expectation (especially among state officials) that KMT will upgrade roads, and that it will provide some schools and clinics.
- Following compensation for crops lost in the clearing of drilling access roads, there appears to be an expectation that many more people will be eligible for compensation. Traditional chiefs interviewed by PACT were adamant of their rights to the land in the KMT concession, and expected to be compensated accordingly. An associated risk is opportunistic occupation of land believed to fall into the compensation net.

- Linked to the above, the SIA found evidence of a perception that all farming and artisanal mining activities will be excluded from the project concession area. The perception is not necessarily widespread.
- The PACT survey also found that hindered access to land was an issue in several villages. KMT operations have reduced access to some farming areas as a result of road and plant construction

6.14 Revealed Development Needs and Initiatives

In the course of socio-economic information gathering, numerous development needs and initiatives were revealed. Some of these were identified by informants, whilst others were outlined in formal and informal documents. The table contains an overview of the revealed development needs and initiatives.

Table 6.11: Development Needs and Initiatives (2004)

This list will be updated with more recent updates from the communities in close collaboration with the public liaison Committee.

Proponent	Expressed Needs	Current/ Planned Initiatives
Office of the Mayor, Kolwezi	Water Roads Electricity	Electrification of Kayembe Village Hearse for Dilala / Manika Improvements to mayoral facilities (including residence, guest house, and offices) Improvements to the Manika Market Improvements to street lighting ⁴
Regideso	Development of alternative water sources for Kolwezi and sourcing of donor funds	
Kamimbi women	Reliable water sources Electricity Business training (for example carpentry – for manufacture of coffins) Transport for agricultural goods and charcoal (to markets) Access to jobs Access to hospitals and health care	

⁴ Source: Etat des Lieux de la Ville de Kolwezi et Plan d'Action à Court Terme (Office of the Mayor, 24 June 2004); Annual Report 2003 (Office of the Mayor, 2004).

Proponent	Expressed Needs	Current/ Planned Initiatives
UZK youth	Sports facilities Access to education Recreation centres	
Gécamines	Preventative Malaria programme	Use of radio for health and hygiene promotion Technical training institute
NGOs 9 (see Table 6-16 for detail)	Democratic institutions and elections Food security Preventive medicine	Assistance to agriculture Support to health and immunization Support to women and children Emergency food supply Support to education Microfinance Civic education Support to entrepreneurship
General	Addressing barriers to entrepreneurship	

It is notable that NGOs are key drivers of community-level development initiatives in and around Kolwezi. This collective is a potential resource for future development work funded by FQM.

6.15 Cultural Heritage and Archaeology

6.15.1 Methodology

An archaeological and ethnological specialist study was undertaken by Professor Donatien Muya of the Lubumbashi Museum. A survey of the concession area was conducted between 16th to 23rd August 2004. Site maps and available literature were reviewed and this was followed by ground surveys focusing on the areas proposed for the new plant and new tailings dam sites; however the entire concession area was covered superficially. Trenches of 1 m X 1 m were dug where it was deemed necessary to investigate the potential presence of archaeological remains below the surface. The status and lineage of traditional chiefs in the Kolwezi area (including their kinship, lineage and political appointments) were investigated through discussions with local people. Meetings were then set up with Chief Kamimbi and Chief Kanyembo on site. The chiefs assisted either directly or through their advisors and village elders in locating cemeteries, sacred places and sites dedicated to ceremonies in the Concession Area.

6.15.2 Archaeology

Walk-over surveys were carried out at ten different sites within the concession area and a further two east of the concession area (sites 1 to 12 indicated in green on Figure 6.3). Of these, only four

indicated an archaeological presence (sites 1 to 4 in blue on Figure 6.3 named by the specialist as CIM, KAM, KAS and MUN⁴). Trenches of either 1 m² or 2 m² were dug at these four sites and the findings of each are summarised in Table 6.14 below. Of the archaeological sites only the site of Kalenge, named KAM, requires further systematic excavation.

6.15.3 Ethnography

A number of sites of ethnographic importance were located in the concession area; including 12 cemeteries and/or grave sites (sites 1 to 12 in pink on Figure 6.3), three sacred sites (sites 1 – 3 in red on Figure 6.3) and one site used for conducting ceremonies (site 1 in blue on Figure 6.3). Further detail on these sites is provided in the sections below.

Cemeteries

A total of seventeen cemeteries/graveyards were counted in the Concession Area. The only typology carried out concerns social status, age and twinning. Grave sites 1 and 2 include 3 chiefs (Chief Mubalo Kamimbi, Chief Mayeba Kamimbi and Chief Kamimbi Kazadi) and one grave for Princess Inanfumu wa Mayeba; as such these are also considered to be sacred sites (sites 1 and 2). The precise age of these cemeteries is unknown, however the specialist is of the opinion that these cemeteries date back to 60 years at the most, classing them as recent cemeteries.

Sacred sites

Three sacred sites were found on the concession area. Site 3, situated on the Muninga Stream, west of the Musonoi tailings deposit, is classified as sacred since this forest is visited before a hunt in order to converse with the spirits and bring good luck on the hunt. Certain sections of the forest cannot be entered by people unless they are part of “les delegations en provenance du chef de Terre Kamimbi”. Sites 1 and 2 comprise the graves of members of the chiefs’ families as discussed above.

1.1.1⁴ CIM: in the vicinity of the *Tshamudende* cemetery. KAM: Kamimbi; the site included in the circumscription of Chef Kamimbi; I used the name KAM in honor of Chef Kamimbi. KAS: river Kasambo. MUN: river Muninga.

Table 6.14: Description of archaeological sites in the KMT concession

Site name	Location	Contents	Trenching
CIM (site 1 - blue, Figure 6.3: Map indicating the location of archaeological and ethnological sites	Situated in an area adjacent to the cemetery of Tshamudende	Lumps of burned earth and shards of pottery.	A 1m x 1m pit was dug. The archaeological evidence exposed on the surface extended to a depth of 45 cm; it was in the upper layer, wrapped in a thin humid layer and continued until it reached an argilo-sandy layer. It consisted of small fragments of tiny burnt termitaria, powdery charcoal and shards of pottery. Termitaria are common in the region surveyed. The structure found resembles a kitchen hearth. Villagers still use this type of termitaria, usually three of them, to secure cooking pots firmly on top of the fire. As to the period, the structure is sub-recent at the most; its hardened nature may be due to its location right in the middle of one of the most used paths, as observed.
KAM (site 2 – blue, Figure 6.3: Map indicating the location of archaeological and ethnological sites	Located in “Chief Kamimbi’s area”	Shards of pottery, slag, blocks of burnt malachite, pieces of a nozzle, pieces of burnt earth, bones and a copper cross.	A trench of 2m x 2m was dug which unearthed pottery shards, slag, pieces of malachite and burnt earth as well as fragments of nozzles. From a stratigraphic point of view, the archaeological matter of KAM and KAS were located between the bottom of a humus layer and the upper part of a silty sandy layer, at a level varying between 30 cm and 40 cm of thickness. At this site the archaeological matter found during prospecting and that coming from the trial pits was identical on the whole. Among the shards of pottery, two flat bottoms and one round bottom as well as two rims, flat and averted outwards and inwards. The walls are generally thick (1cm on average). Two colors predominate, black on the inner surface of the wall and grey on the outer surface; although brown is rare, it is found in particular on two edged shards. The pottery is generally black and contains pieces of quartz. Within the pottery, we have noticed a handle made in the shape of a point. The copper cross found (measuring 1,5 cm) corresponds to type HH as per De Maret’s typology (1995 ; pp.140 et sq.). This type of cross has been found in other parts of Katanga, in this case in Kamoia (Cahen, pp. 199-200) and Sanga (De Maret, 1985, pp.162-163 ; Nequin, 1963, pp et sq.). The most recent calibration curves date these little crosses back to the 16th – 17th centuries of our era (De Maret, 1995, P. 139).
KAS (site 3 – blue, Figure 6.3: Map indicating the location of archaeological and ethnological sites	Situated in the valley of the river Kasombo/ Kilenge	Shards of pottery, pieces of malachite and burnt earth as well as slags.	A 1m x 1m trench yielded shards of pottery, fragments of burnt malachite and pieces of burnt earth. The shards from KAS are few and atypical. Their association with slag fragments of burnt malachite and blocks of burnt earth is reminiscent of metallurgical activities, nothing more. From a stratigraphic point of view, the archaeological matter of KAM and KAS were lying between the bottom of a humus layer and the upper part of a silty sandy layer, at a level varying between 30 cm and 40 cm of thickness.
MUN (site 4 – blue, Figure 6.3: Map indicating the location of archaeological and ethnological sites	Situated on the Muninga River	only pieces of burnt earth were found	No trenching was done at MUN. However, by cutting with a trowel the humus layer, we discovered pieces of burnt earth and malachite as well as a rusted knife blade. The findings from this site comprising fragments of burnt earth are, after examination, the results of a recent charcoal kiln. This phenomenon has been found in more than one place on the KMT concession.

The following explanations are proposed regarding the sacred character of the identified sacred sites:

- The existence of graves of chiefs concerning the river Kalenge.
- The presence of specific and useful flora in the two gallery forests.

Although enquiries were made into the use of specific plants within the area no information was forthcoming.

Ceremonial places

Only one place was pointed out as a place where ceremonies are conducted. It is situated on the piedmont of Mount Kasobantu close to the Kasobantu dam. The importance of this site is linked to its topography and biotype.

Further enquiries into the aim and content of the ceremonies performed provided with the following reasons why ceremonies were held;

- in cases of food shortage;
- "abnormal" multiple deaths;
- unexplained pandemic;
- enthronement; and
- Inauguration before mining activities etc.

In short, ceremonies were obligatory each time there was a situation to confront, which requires recourse to the supernatural. No information was ventured on the content of the ceremony. However, Chef Kamimbi told Prof. Muya that it was possible to have access to the content of the ceremony on condition that he "drank kaolin", i.e. subject to being anointed. This could take place at the inauguration of KMT activities.

Generally speaking the KMT concession is archaeologically poor. Secondly, archaeological evidence encountered relates without exception to the Iron Age. With the exception of one site, all the sites identified have undergone perturbations, essentially anthropogenic due to artisanal works and mining activities. None of the archaeological or sacred sites occur on the proposed footprint areas.

Figure 6.1: Map of Project Affected Area

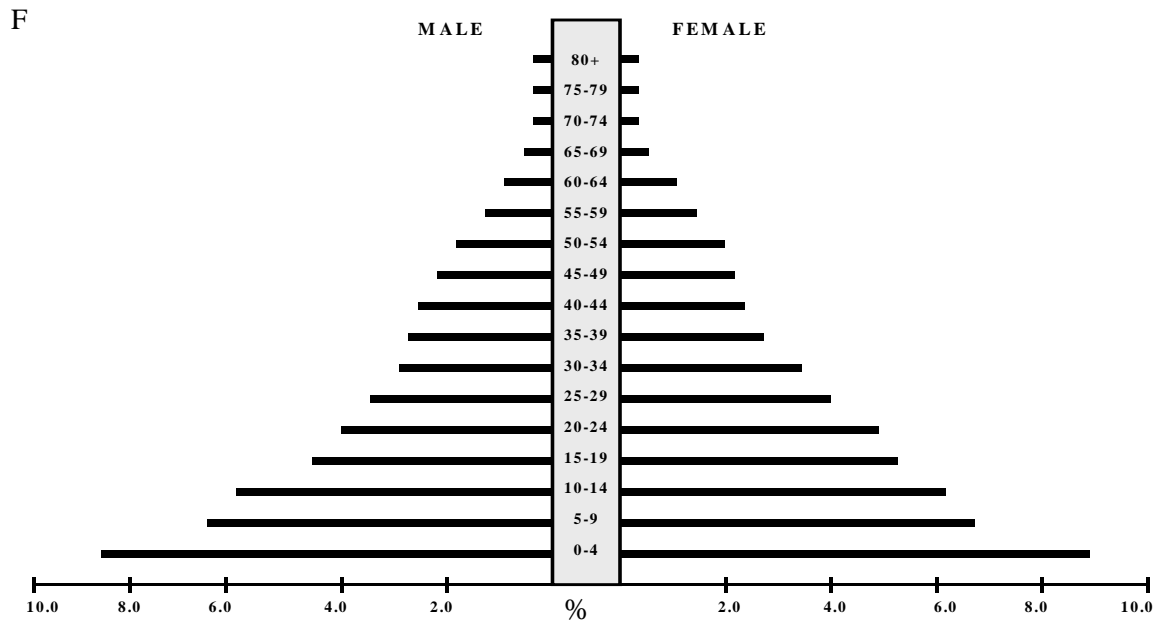


Figure 6.2: Age and Gender Structure – Kolwezi District 2003

Figure 6.3: Map indicating the location of archaeological and ethnological sites