Democratic Republic of the Congo

Poverty and Social Impact Analysis

Mine Sector Reform

June, 2007

Environmentally and Socially Sustainable Development
Africa Region

DOCUMENT OF THE WORLD BANK
ACKNOWLEDGMENTS

This report was built upon work carried out by a team at the University of Lubumbashi, coordinated by Prof. Kuamba Lufunda, Rector, and the following team members Eric Monga Mumba, Mbayo Musewa, Jacques Baijika, Delphin Kahimba Mpyana, Florence Ital Kapend and Kalaba Mutebusha. The University of Lubumbashi team worked tirelessly and this would not have been possible without their high level of commitment to the future of the Katanga province.

The World Bank Task Team for this project consisted of Sarah Keener (Task Team Leader, Social Development Specialist, AFTS2), Vincent Fruchart (consultant), Simon Mboso (consultant), Nils Junge (consultant), Ingrid Mollard (consultant) and Anne Mossige. It was completed at the initial request of Paulo de Sa (at the time, Lead Mining Sector Specialist, COCPO).

The Government committee responsible for parastatal reform in DRC, COPIREP, financed the local research costs (through the Private Sector Development Competitiveness Project), managed the research locally, and followed both the analysis and the discussions on implications throughout, organizing, jointly with the University of Lubumbashi a conference with diverse stakeholders in Kinshasa in June, 2006. Special thanks go to Professor Ilunga Ilunkamba, COPIREP’s Executive Secretary, as well as to his team who put in endless hours – Andre Mushama and Jacques Muhokolo and many others at URK/COPIREP– working both with Bank staff, University of Lubumbashi researchers, and consultants. Finally, thanks go to the staff of Gecamines who also devoted numerous hours to discussions and interviews, particularly to Urbain Mayaya, Dr. Victor Makwenge, Mr. Jeannot Bakasanda and the voluntary departees and miners themselves.

The World Bank helped to provide technical assistance, training, and added analysis to the University team. Consultants Vincent Fruchart, Nils Junge and Ingrid Mollard provided essential support to the University of Lubumbashi and COPIREP team, contributing to the analysis and capacity building. Simon Mboso and Anne Mossige played a lead role in the dissemination and discussion of the University of Lubumbashi’s report findings, by elaborating summary documents for discussion with a wide range of sectoral stakeholders and managing sectoral working groups and a participatory workshop in June 2005 in DRC. Thanks go to World Bank staff who provided invaluable comments including Ivan Rossignol, Jean-Pierre Manshande, Renate Kirsch and Pedro Alba.

The report was based on a participatory process which included not only workshops in each main mine town on the preliminary results, but also, as noted above the formation of sectoral working groups in Kinshasa and in Katanga culminating in a broad workshop on policy options. Our deepest gratitude goes towards the many local participants, partants, and other stakeholders who both participated in the review of the report, as well as in brainstorming sessions to develop a logical framework of response to what the findings would mean.
We thank the Belgian Trust Fund for its significant support for the consultative workshops that took place in DRC, and the Trust Fund for Environmentally and Socially Sustainable Development, generously provided by the Governments of Norway and Finland for funding some of the international consultants who provide guidance and advice to the national teams.
# ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BCECO</td>
<td>Bureau Centrale de Coordination</td>
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<tr>
<td>C.S.K.</td>
<td>Comité Spécial du Katanga</td>
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<tr>
<td>COPIREP</td>
<td>Comité de Pilotage pour la Reforme des Entreprises Publiques</td>
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<tr>
<td>CPN</td>
<td>Consultation Pré-Natale</td>
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<td>CPON</td>
<td>Consultation Post-Natale</td>
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<tr>
<td>CPS</td>
<td>Consultation Pré-Scolaire</td>
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<tr>
<td>DOP</td>
<td>Dispense Obligatoire de Prester</td>
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<tr>
<td>DTCoQ</td>
<td>Vaccin Contre la Diphtérie, le tétanos et la Coqueluche</td>
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<tr>
<td>EC KIMB</td>
<td>Ecole Conventionnée Kimbanguiste</td>
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<td>EC Privée</td>
<td>Ecole Privée</td>
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<tr>
<td>ECC</td>
<td>Ecole Conventionnée Catholique</td>
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<tr>
<td>ECP</td>
<td>Ecole Conventionnée Primaire</td>
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<tr>
<td>EMAK</td>
<td>Association d'Exploitants Miniers Artisanaux du Katanga</td>
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<tr>
<td>ENC</td>
<td>Ecole Non Conventionnée</td>
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<tr>
<td>FC</td>
<td>Franc Congolais</td>
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<tr>
<td>FDC</td>
<td>Fédération des Coopératives de Kambove</td>
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<tr>
<td>G.C.M.</td>
<td>Générales des Carrières et des Mines (GECAMINES)</td>
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<tr>
<td>H.T.</td>
<td>Haute Tension</td>
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<tr>
<td>IRA</td>
<td>Infection Respiratoire Aiguë</td>
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<tr>
<td>KMC</td>
<td>KABAMBAKOLA MINING COMPANY</td>
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<tr>
<td>KW</td>
<td>Kilowatt</td>
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<tr>
<td>KWH</td>
<td>Kilowatt-hour</td>
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<td>MOC</td>
<td>Main d'ŒUVRE Cadre</td>
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<td>MOE</td>
<td>Main d'ŒUVRE d'Exécution</td>
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<td>MTI</td>
<td>Métal Transformation Industrie</td>
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<td>NCG</td>
<td>Vaccin Contre la Tuberculose</td>
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<td>NDC</td>
<td>Nutrition à Assise Communication</td>
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<td>OCU</td>
<td>Observation des Changements Urbains</td>
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<td>ODV</td>
<td>Opération Départ Volontaire</td>
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<td>ONG</td>
<td>Organisation NonGouvernementale.</td>
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<td>PSDC</td>
<td>Private Sector Development and Competitiveness Project</td>
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<td>PDA</td>
<td>PANDA.</td>
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<td>PME</td>
<td>Petites et Moyennes Entreprises</td>
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<td>PMF</td>
<td>Programme Minimum de Fonctionnement</td>
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<td>PMS</td>
<td>Programme Médico-Sociaux</td>
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<td>SGB</td>
<td>Société Générale de Belgique</td>
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<td>SNCC</td>
<td>Société Nationale de Chemin de Fer</td>
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<td>SNEL</td>
<td>Société Nationale d'Electricité</td>
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<td>SOMIKA</td>
<td>Société Minière du Katanga</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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.Currency: 1 US$ = 425 Congolese Francs (1 January 2004)
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EXECUTIVE SUMMARY

1. **Context:** The national mining company in the Democratic Republic of the Congo (DRC), Gecamines, which produced almost a half a million tons of copper metal in 1989, now barely produces 12,000 tons a year; yet it is sitting on considerable copper deposits and the world’s largest share of cobalt reserves (36%). At 1989 production levels, these reserves could carry the company well over into the next century. In 2003, it was reported that the company had accumulated roughly US$1.6 billion in debt, was bankrupt, and had not been able to pay a majority of employees in over two years. Gecamines’ collapse can be largely traced to institutional factors, rather than an exhaustion of its deposits or a downturn in international markets. The incentives it faced as a public enterprise with a politically nominated management served to minimize the company’s focus on its core commercial priorities, in favor of meeting the interests of political actors to maximize short-term interests and rents, particularly under the Mobutu regime. This incentive structure combined with the turbulent political environment led to massive declines in investment, declines in productivity, and the loss of a predominant role in world copper markets.

2. The lack of a commercially oriented strategy also permitted the provision of a high level of social services (high quality health, education, social infrastructure) to Gecamines’ employees and their extended families for many years. The lack of strategy also meant that for years beyond when production had dropped the company had maintained -at least in appearance- most of its employees and social services, opting to accumulate debt instead of reducing its staff size or social charges.

3. In 2003 the Government of the DRC decided that recovery of the mining sector could only be achieved with the restructuring of (i) Gecamines itself including a downsizing program of about half of Gecamines’ employees, and, (ii) of its welfare role vis-à-vis the communities in which it operates. The restructuring of Gecamines is hoped to serve an essential role in decreasing Gecamines’ contribution to overall national debt and reviving this national source of income which still holds high potential.

4. **Objectives:** The PSIA was requested at the beginning of the voluntary departures program. Because of the urgency of quickly identifying risks given the ongoing program, an action-research approach was adopted which placed priority on feeding ongoing findings directly into a dynamic process and on local ownership of the research. Therefore, the PSIA objective was to provide an analysis of the projected impacts and risks of the voluntary departures program and of the dependence on Gecamines’ ancillary social services which were being affected by Gecamines’ bankruptcy. The University of Lubumbashi (UNILU) carried out the research with the technical assistance from the World Bank, and shared its findings with stakeholders as they emerged, including national level discussion of the draft report in June 2005 with stakeholders at the regional and national level. This report

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1 These are estimates which would require a more thorough audit, though it is clear that the debt is substantial. Of this estimated debt, roughly $800 million was deemed to be financial debt, about $420 million in debt to suppliers such as the railway company, the electricity, and water utilities, and about $100 million in debt to employees in unpaid wages prior to the retrenchment operation.
summarizes this process and the actions it led to, provides updates where available, and outlines areas that would benefit from further research. This research does not replace ex-post analysis, for which more recent field research would be required.

5. The lack of available data (census data, household surveys) meant that the PSIA needed to build upon existing information (in this case baseline data collected by the University of Lubumbashi) and focus on key indicators that could be monitored later on in the program.

6. The rapid initial assessment as part of the PSIA led to the integration of several actions in the departures program, as well as the design of interim programs to support Gecamines’ schools and clinics which managed to prevent Gecamines’ schools from closing for at least two school years. The process framework that was adopted included workshops on findings in the main mine towns, the completion of a participatory logical framework exercise carried out by a multi-stakeholder group on how to respond to the findings of the rapid assessment and to data emerging from the monitoring systems that had been put in place, sectoral working groups to review findings and to develop operational strategies on the implications of the findings with a focus on the future of the Gecamines social services, a workshop bringing together national and provincial level stakeholders to discuss the PSIA results and next steps, and the design of a monitoring approach through baseline surveys, sentinel groups, and control groups.2

7. **Projected Impact of Departures Program:** The initial analysis of transmission channels identified both short- and medium-term potential risks to those who participated in the voluntary departure program, known as partants, and to others. However, a comparative analysis of the impact of Gecamines’ decline (the failure to reform), pointed to the much larger impact that no departures program would have had (see Tables 7 and 8). Over the short-term, some of the identified risks of the departures program included the risk of inflation within the Katanga province from the influx of payments, exchange rate fluctuations which would spill over into the general population, theft of monetary packages from partants, deposit of partants’ packages with schemes that were not viable, and abrupt cessation of access to social services, particularly the potential descolarization and social isolation of children of partants who were enrolled in Gecamines schools.3 The departures program was also projected to lead to the merging of some classes and schools given the number of teachers who left, and an increase in the student/teacher ratio.

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2 This included workshops in mine towns, as well as a national level workshop in June 2005 incorporating the feedback from sectoral working groups that had been formed to consider the implications of the PSIA findings for future action. The stakeholders involved in this process included both those from Katanga (mine employees, partants, representatives of vulnerable groups such as widows, union members, sectoral ministries, PRSP focal points, donors and others) and national level stakeholders (sectoral Ministries, donors, PRSP focal points etc.).

3 Initially Gecamines reported that there were 23,000 children of partants in Gecamines schools, but then later reported 14,000 such children. It is not clear whether the number dropped because of an initial misreporting, or because the children had been told by their parents not to report that their parents had received packages because they feared being kicked out or stigmatized, or whether some students had dropped out during the intervening period.
8. In terms of the likely medium-term impacts, the PSIA found that the situation of the miners had deteriorated so substantially during the decline of Gecamines, that the direct impact on wages and employment would be insignificant compared to traditional downsizing programs and compared to the alternative, not downsizing; just prior to the departures program, over 80% of Gecamines workers reported eating only one meal a day, compared to 45% to 55% in a non-Gecamines control group, and compared to 27% nationally.

9. Another identified risk was that partants would disperse, but would not have any central place to go to for information on reinsertion activities that may emerge later, or for problems they were experiencing. In similar programs in other countries, ex-miners often experience psychological difficulties when their only social network – the mine company – is gone and they have not adequately developed alternative social support systems. In addition, analysis of assets, and skills levels for the partants forshadowed a similar trend to that found in neighboring Zambia where higher level workers (directors, managers) were more likely to see their income increase after leaving the mine company, compared to blue collar workers on the lower end of the hierarchy.

10. The PSIA identified several factors that could constrain the potential income from the activity that the overwhelming majority of partants would engage in, subsistence agriculture. This included the partants' lack of capital to the lack of good roads, distortions in input markets and low level of agricultural extension. It is notable that in 2001, the Katanga province ranked among the lowest in terms of agricultural extension, or any other type of development support: 2.2% of households benefited from agricultural extension services, as compared with 9.3% on national average (14.6% in western Kasai, and 31.1% in the Bandundu). This stems, again, from the historical perception that Katanga was a rich province and needed less outside help, particularly in areas outside of mining. The agricultural advice that had been put in place for reinsertion through the PSDC project had the potential to serve no more than 27% of partants, and thus could not be expected to fully compensate for this shortfall in public services.

11. Among the partants, some groups were identified as more vulnerable than others, and the most worrisome characteristic was their advanced age (on average, 56 years old at the time of departure) and the fact that the majority had worked at Gecamines their entire life (32 years on average). Their experience working within a formal hierarchical environment left many without the entrepreneurial, budgeting, or networking skills required in other sectors. Some of the most vulnerable groups among those who left Gecamines include: about 12% who reported living in precarious housing and 12% who were renting their home, about one-third (3,420 people) who were over 60 years old, widows who were partants themselves (410 people), and approximately 25% who had more than two dependent children of school age to support. In terms of which individuals met more than one of these criteria simultaneously and therefore were most vulnerable, 2.6% of partants reported being over 60, having more than two children in school, and living in precarious housing and this jumps to 54% if one uses the same characteristics but includes those also living in rented housing. A common concern voiced in several locales, was the failure of the pension

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system (stemming both from Gecamines’ failure to make contributions to the national social
security program - INSS – and to problems with that program itself).

12. As in the neighboring Copperbelt region of Zambia, the extreme dependence on
Gecamines combined with several years of economic strain on family networks left a legacy
of low social capital which can ultimately inhibit the potential income of partants. Katanga
province has among the lowest number of NGOs in the DRC, and only 4% of partants
belonged to any form of association and 3% belonged to a true cooperative involving joint
work at the time of departure. An added phenomenon which arose was the antagonism
between those who had received departure packages and those who had not met the criteria
for leaving Gecamines; one symptom was conflict among the children of partants in schools,
where they would try to hide the fact that their parents had received a package, for fear that
they would be kicked out unless they then provided a greater share of payment to the unpaid
teachers, and that they would be ostracized by classmates.

13. Update: A January 2006 evaluation conducted under the PSDC project found that
93% of the partants were engaged in some form of economic activity, with a large variation
between those engaged in group versus individual projects (the former having average
annual revenues of US$28 versus annual average revenues for the latter of US$982). These
levels of revenue are likely higher than what the partants received in salary payments in the
year prior to their departure from Gecamines and thus the departures program was
preferable to its alternative (to do nothing). However, these revenue levels remain lower
than the average workers’ salary that they received before Gecamines’ financial difficulty and
reflect the overall economic decline that accompanied Gecamines’ deterioration. If one
includes the number of dependents on a partant in his household, then most would be under
the poverty level of US$1 per day. However, these projects generated employment as
collective projects involved an average of 30 employees of which 13 were permanent and
individual projects involved 8 employees of which 3 were permanent.

14. The same evaluation confirmed that some of the systemic regional issues highlighted
in the PSIA analysis are impeding productivity; agricultural productivity per project
decreased between 2003 and 2004, with about half of the production being auto-consumed.
The lack of road networks means that production is sold primarily to clients who are not far;
in 2004 84% of the projects in Lubumbashi commercialized their surplus production in the
same basin, similarly with 89% and 94% of the project in the basins of Likasi and Kolwezi,
which represents a low level of exchange between sites.

15. Impact on Ancillary Services: Gecamines represented not only the largest formal
employer in the province but also played a quasi-municipal role in the provision of social
services given the weak presence of the state, with a prominent role in health, education,

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5 The reported figure for cooperatives was 19% but included a large number of partants who all joined an
investment scheme in Likasi which did not involve working together on a day to day basis and thus this figure
has been adjusted to reflect this.
6 "Evaluation des Activites de Reinsertion des Partants Volontaires de la Generale des Carrières et des Mines 'Gecamines'
7 Each project in agriculture and elevage produced 7.7 and 14.5 tons in 2004 compared to 14.6 and 15.4
respectively in 2003.
8 There were over 23,000 employees prior to the departure program.
water supply and electricity. Its decline therefore had repercussions well beyond the direct impact on its employees. It is notable that in 2003/4, there were almost twice as many students in the mining basin in Gecamines' schools as there were in all public primary and secondary schools in the basin. Rates of dependence were substantially higher in Kolwezi than in Lubumbashi. For secondary health care, Gecamines served over a million non-Gecamines patients as it managed numerous hospitals, including Sendwe, and held from 40% and 60% of all hospital beds in the mining basin. As was typical for secondary mine towns, in Kipushi, Gecamines health services provided positive externalities to the entire community; it sprayed for malaria, ran HIV education campaigns, and offered hygiene education for the community at large (these were all stopped when Gecamines financial problems surfaced). Between 75% and 84% of the electricity utility’s production in the mining basin was consumed by Gecamines (both industrial and residential). The water utility, REGIDESO, was owed $US 22 million by Gecamines for water it was providing to Gecamines workers in Gecamines townships (citées) which Gecamines was to pay for, and was dependent on Gecamines for the supply of roughly half of the water it sells in the mining basin, with complete dependence in towns such as Kolwezi, Kambove, Kakanda and Luena; in parts of Kolwezi there had been no water for 3 years because Gecamines' pump had broken down. Thus, Gecamines’ financial decline prior to the departures program affected the financial viability and service quality of these utilities as well.

16. The decline in Gecamines’ revenues translated into decreased budgets for its ancillary services. Uncertainty about the future of Gecamines’ social services and continued financial insolvency led to an even further decline in these budgets around 2003. The departure of from 30% to 40% of the staff in these schools, clinics and hospitals also contributed to a decline in service quality and, eventually, to increases in prices of these services. The changes emerging from Gecamines’ deterioration had perhaps the greatest impact in terms of lower quality and decreased enrollment on children in schools with a concentration of blue collar workers (73% of Gecamines students were in this category) for four reasons: (a) their parents, and most likely themselves, were only eating one meal a day (82% to 85% of Gecamines employees were in this situation prior to departure as most had not been paid in over two years); (b) they were not able to participate in existing school feeding programs.

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9 There is a population of about 256,209 school-age children in the mining basin and 934,246 school age children in the Katanga province. Most schools in the mining basin are run by private or religious groups, with only 5% of primary school students and 18% of secondary school students in public schools (see Annex 3). The greatest share of Gecamines students, close to 80%, are in primary schools. Also, it must be noted that Gecamines schools are distributed in a two-track system, with schools for children of MOE (main d'œuvre d'exécution, or low level workers), which represent about 80% of enrollment, and schools for children of MOC (main d'œuvre cadre, or management). MOC schools had a better reputation, and were gearing their students towards higher education paths. However, many observers doubt that the quality of education has remained the same.

10 In 2004 according to REGIDESO in Katanga.

11 Estimates of debt to SNEL are in the order of US$211 million.

12 Gecamines schools, like its workforce was divided into a two tier system: certain schools for managers/director, or MOC – about 5,000 primary school students or 17% of those in Gecamines primary schools – and schools for blue collar workers, or MOE – the remainder. On average, schools of the MOC are likely to have higher income parents (even if not paid, research in the mine sector in neighboring Zambia showed that higher level staff are likely to have better education, better access to capital and to opportunities and to fare better after retrenchment than others).
because of their status as part of Gecamines and (c) as of 2003, their teachers had also not
been paid by Gecamines and thus were prone to strikes.

17. In terms of health care, anecdotal reports from Gecamines’ doctors referred to rising
rates of malaria and TB following the decline in Gecamines budget and discontinuation of its
community health programs. In addition, absenteeism and lack of supplies for drugs and
materials diminished quality. As one indicator, the number of working beds in the Sendwe
Hospital declined by almost 30% from 2000 to 2004 and consultations dropped by 61%
between 2000 and 2003 both because of declining quality and diminished capacity to pay for
things such as drugs which Gecamines no longer supplied. In response the medical group
began instituting fees for various services, which may eventually improve quality, but which
is likely to have a regressive effect in terms of access for the poorest households.

18. The impact both of Gecamines departures program and of its financial insolvency is
particularly acute in secondary towns, and in towns that are physically isolated, which tend to
have the fewest alternatives to Gecamines for health care, education, water supply, and
employment. This confluence of factors is concentrated in areas such as Kombove,
Kakanda, Luena, parts of Likasi, Mangombo, Kasonga, Kando, Kipushi, and parts of Kapate
and Musonoie in Kolwezi. The combination of the growth in artisanal mining, particularly
among youth, combined with increases in school costs and potential closure of some
Gecamines schools could thus contribute to descolarization in towns such as Kolwezi,
where 56% of the students in Gecamines primary schools (or 37% of all students in Kolwezi
primary schools) have only one or no other school within a radius of 15 kilometers.

19. In late 2003, the status of these social services remained in limbo, creating a risk of
further declines in service quality. The cost of failing to make a decision on the future of
these services was highlighted during the national multi-stakeholder workshop in June 2005
on the UNILU’s PSIA findings, which brought together stakeholders from numerous
ministries together with stakeholders from Katanga to initiate a participatory dialogue on
what the options for future ownership and management of these social assets might be.
The workshop participants endorsed, among other things, the recommendations of a 2003
analysis of Gecamines by IMC which recommended that ancillary social services be ring-
fenced and eventually separated from Gecamines. However, at that time further research
was required in order to understand the concrete implications of such separation and what
options existed for specific schools and clinics.

20. Update: More detailed studies of the future options under the Gecamines health and
education sectors have been financed under the PSDC project. With the electoral period
over, there is now a new opportunity to assess these options together with regional
stakeholders.

21. Responses to analysis and risks: Several of the short-term risks identified in the
initial PSIA scoping were fed directly into actions undertaken by the local office of the
committee charged with parastatal reform (URK/COPIREP) which was managing the

13 Comparable data on disease incidence over time is difficult to come by because of the breakdown in the
data gathering of public health systems during the period of political and economic turbulence.
departures and reinsertion support, or had been anticipated in the design of the departures program. This included:

③ The initial PSIA analysis highlighted the deep dependency on Gecamines which thus meant that both the departures and reinsertion program would require the actions of a broad range of stakeholders. The URK office created a multi-stakeholder consultative committee (comité consultatif) to monitor areas of reform that had been identified as holding risk in the short-term. Because the baseline survey revealed that partants generally hesitated to work in groups, communications campaigns on how to save one's package and on the benefits of working in groups were implemented. On a follow-up visit to Kolwezi in 2004, roughly one year after the end of the departures program, the percent of partants who belonged to an association had more than doubled compared to the pre-departure baseline. It should be noted that the most recent program evaluation cited above found that those in group projects did not perform as well as those in independent projects. However, the causal links of this finding are not clear and would require further analysis; if those in group projects tended to be from a lower rank of workers because they joined groups as they lacked initial capital or skills this could cause lower revenues, or if those in group projects were more likely to participate in agricultural schemes this could also bias towards lower revenues. In addition, problems with the management of one of the largest group schemes in Kambove would also significantly affect these findings.

③ Staffed information centers were created for former employees in each major mine town so that partants had a place to go for information and follow-up. These provided a channel for monitoring those who had left, and of providing information on programs, training opportunities, jobs and information on benefits, and also alerted the project office to potential problems. Thus, it was through this type of active monitoring that the project office became aware of the high risk because of poor management of a cooperative scheme in the Likasi area (in Kambove) which was managed by a priest, cited above, which over half of all partants in one town had joined, and subsequently intervened with technical assistance on financial management to reduce the risk to this group.

③ The local consultative committee facilitated the identification and mitigation of the short-term risks as they arose. For example, the Governor intervened in public communications to discouraged predatory pricing practices to minimize inflation, and to ensure that there were increased police patrols to protect partants during payment periods. In addition, the URK/COPIREP office ensured that the Central Bank was aware of the likely demands on local currency, and responded accordingly. The URK/COPIREP office also engaged in negotiations with banks to secure preferential rates on deposit facilities for partants (though this remained a challenge in Likasi).

③ After the analysis showed the potential for abrupt descolarization of children in Gecamines schools, a program was designed to provide interim subsidies directly to teachers. The subsidy provided an incentive for parents to form associations (where

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14 This included, among others, the Governor’s office, municipalities, unions, the police, social assistants, NGOs, and representatives of the Central Bank.
they had not) as this was a requirement, and implicated them by having them monitor teacher attendance. Teachers who had not showed up for work, would not receive the subsidy and this provided an incentive also for teachers to continue their work even prior to the subsidy being paid. The subsidy allowed the children of partants to remain in school for school year 2003/2004 and 2004/2005 and thus ensured that at least 41,000 students in Gecamines schools were able to continue their education. Among these, were at least 14,000 children of partants who were able to remain in school. Interim support was also provided to Gecamines’ health care for a two year period, though this took longer to organize.

As noted earlier, broader stakeholder consultations were organized on the options for the future of Gecamines social services with the involvement of those directly affected; this was initiated through the formation of sectoral working groups both in Katanga and in Kinshasa and with a workshop in June 2005 to discuss the implications of UNILU’s PSIA studies. The consultation included representatives from unions, parent-teacher committees, partants, sectoral ministries and many others (see Annex 4). This workshop demonstrated the desire of local stakeholders to see mine reform proceed, and contributed, in part, to a broad consensus on the need to move forward on the recommendations of a study of Gecamines (carried out by IMC) and subsequently the long-stalled initiative to bring in a management team to Gecamines proceeded.

In addition, an important component of the PSIA included training potential trainers at the University of Lubumbashi in quantitative analysis of the effectiveness of interventions in retrenchment operations, using sample data from Zambia and training in SPSS. The research team, the project team, and other stakeholders were also trained in logical framework analysis, and then applied this with multi-stakeholder groups to analyze strategies and solutions for reinsertion in each mine town.

22. Conclusions and Recommendations: As the first major parastatal reform in post-conflict DRC, Gecamines’ experience with downsizing can provide lessons on how to minimize the social impact for other parastatal reform that is ongoing or planned.

23. The local project office’s ability to set up an effective monitoring system and a multi-stakeholder committee at the local level, to devise subsidy schemes to keep children in school and health systems functioning at a basic level and to be pro-active in addressing problems as they arose was quite positive. Also important were having a sufficient number of people on the ground in the local project offices over a sustained period of time to respond to issues as they arose. Nonetheless, a key challenge for the program was the sudden launching of the departures, prompted by the desperate situation of many Gecamines employees who were not being paid. This created a disconnect between the time when partants received the bulk of their funds and the time when reinsertion programs were in place and ready to train them.

24. The psychological impact of the departures program, the sense of shame some felt, and the initial fear miners had of working in networks outside the context of the formal mine present considerable challenges. Communications and outreach programs helped, but other simple measures – such as providing a certificate of years of service with thanks for
service rendered, could assuage some of the psychological stress that dominated discussion among older partants.

25. More recent data confirms that the partants income is greater today than at the time of the departures program, primarily because of their prolonged non-payment prior to departure. Today remaining employees are paid regularly, which represents an improvement over the situation in 2003. Although the PSIA has shown that the voluntary departures program was preferable to its alternative, the overall cost of Gecamines’ past mismanagement has been a significant one as most partants are likely to be earning less today than they did when Gecamines was financially solvent, prior to its decline, as their income reflects the overall economic context within the region.

26. The departure and reinsetion program cannot make up for some of the systemic issues which will influence the future economic welfare of the province and of the partants and it is here at the macro policy level that there are several areas for improvement. The lack of a banking system in which partants could deposit funds without penalty, and in which they had confidence, presented a substantial obstacle in places such as Likasi. Overall, the reinsetion options not only for those who have left Gecamines but for their children will depend on whether there is sufficient reform to re-start large scale mining in Katanga province, whether the nature of that reform generates employment for the next generation of Katangais, whether the use of mining resources generates public benefits in the form of taxes and revenues that are invested efficiently in basic health and educations services, and whether reform to diversify the economic base in the region is supported by national policies and resources. Given the advanced age of the partants the key question concerns the economic future for their children, and this depends on the future of both agriculture and mining.

27. With the completion of elections, there is an increasing interest in the mine sector by the private sector. Many concessions are taking place, and will take place on concessions previously owned by Gecamines. While some of these contracts appear to be above board, the fairness of others has been questioned by national and international observers. Ensuring a transparent process that involves local stakeholders in decisions on mining and how its benefits will be allocated is critical at this stage.

28. For the moment, it is likely that a significant percentage of the children of partants are involved in artisinal mining, which provides revenues but also carried with it issues of occupational health and safety, lack of environmental protection, child labor and other social problems such as increased drug use. The new mining code in 2002/3 provided guidance on regulations for the mining sector, including the artisinal sector, but implementation has been weak, with problems in the capacity of the state to enforce the code. Although many concur that the income that could be generated from the resumption of large-scale mining would provide significant benefit, there are nonetheless risks from such reform that may cause stakeholders to oppose it: it is likely that the artisinal miners would no longer be allowed to operate on mine site concessions and thus the variety of actors who benefit from

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15 Data shows that salaries are being paid, although it is not clear whether the backlog of salaries for the time when employees were not paid has been resolved. This will be an issue for any future departure operations.
the current trade locally may resist such reform; and second, that the production of larger quantities of cobalt depresses the world price for cobalt and thus the market for the small-scale cobalt producers. Thus, certain interest groups are likely to oppose mine reform and care must be taken to ensure that the employment aspects are adequately addressed. While this report summarizes an analysis of the poverty risks of the departures operation that occurred in 2003/2004, it cannot address the many changes that have occurred in the mining sector since that time; another ongoing economic and sector work (World Bank, Mining: Growth and Governance) will explore this issue in further detail.

29. The PSIA analysis consistently pointed to the differential impact of the departures program with certain sub-groups of partants being at higher risk for dropping into poverty (for example, the roughly one-third who did not own their home at the time of the departures program), and with certain secondary mine towns being more vulnerable to the weaknesses in Gecamines social services or declines in Gecamines’ activities. It is important that there is an institution or multi-stakeholder committee tasked with ensuring that these areas are given high priority in any new regional investments, as they are at greater risk than more diversified, accessible towns such as Lubumbashi.

30. Based on these findings, and on feedback from the consultative process, the following key recommendations emerge:

- Developing a consensus on the specific options for Gecamines’ social services will require a clear process framework for the involvement of key stakeholders in Katanga. These stakeholders include parents committees, religious leaders, health care providers, Gecamines current and former workers, union members, sectoral ministries and others who should have some voice in these decisions, and who should be able to access information on the implications of the choices made on user fees, government budgets, and quality of services.

- Making decisions on social assets would be facilitated if this process framework empowered a committee or body which would focus specifically on social assets, as distinct from the overall mining sector, which would ensure the appropriate coordination with relevant ministries and development partners, and which ensured that regional stakeholders have a voice in the decision-making process. Such flow of information to stakeholders and among Ministries is important because if public resources for education or health systems in Katanga do not increase substantially, then the implications of transfer for the operations of these services, for the poverty impact (whether they will need to charge fees to recoup costs), and for the quality of services will differ substantially than if public resources are available, and may affect the choices made.

- A process framework could include an approximate timeline for making decisions (whether continuation with Gecamines, separation of services, sale or transfer) along with clarification of any interim support available for funding a holding company for social services. Such a process framework could provide some transparency to any future transfer of social assets to minimize the risk that they are indiscriminately stripped by
It should also outline how different decisions can be made during the transition process. For example, in some situations there are local groups (religious, former teachers) who are interested in managing some of the empty Gecamines schools. In such situations it should be clear who can make these decisions, who needs to be consulted, and guidelines provided to safeguard the interests of the students. Another option is to transfer Gecamines’ medical assets to a Foundation, which would then run on a cost-recovery basis, though the details and implications of this option remain to be worked out.

Recent elections provide an opportunity to renew the discussion of Gecamines social services and to formalize a participatory decision process. Given the long legacy of dependency on Gecamines, support needs to be combined with actions that enhance local ownership, and avoid the creation of a new body upon which former Gecamines’ workers are dependent. As the two-year transitional subsidies for health and education are coming to an end, it is all the more important to address the need to empower a committee with such representation to address the issues of Gecamines social assets.

Gecamines schools, clinics and other facilities should become eligible for donors, government, and NGO run programs for assistance during this interim period (if they are not already) with a priority on those areas that have been identified as most vulnerable geographically (Kolwezi, parts of Likasi, secondary mine towns). Recent information suggests that upper-end mining staff are being catered to through private clinics, but that the negative distribution impact on lower end workers is not being addressed. The latter requires exploring alternatives such as the provision of more care through confessional or public providers. Empowerment of local associations, such as parents committees, associations of ex-miners, should go hand in hand with any support in order to encourage social capital formation and reduce the dependence on external actors.

The previous tendency to assume that the mining basin has a substantial portion of its public sector needs met through the mining sector no longer fits the current reality. This transformation needs to be integrated into national planning, budgetary and PRSP processes. This will require looking at the level of need for health and education services in a disaggregated manner (including in the more vulnerable small mine towns). This should be carried out through the sector specific studies commissioned as part of the restructuring process and the results shared with stakeholders in the region. Budgets and planning for the Ministries of Health and education will need to take into account the increase in demand on public services as a result of Gecamines decline and its changed role. While this was discussed with the Ministry of Education at the 2005 workshop, the creation of a specific committee on social services could monitor whether this has actually taken place. Urgent needs are to assess the management options of the largest hospital in the mining basin, Sendwe, as well as the options in towns where there are only Gecamines’

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16 While one tradeoff of transitional support is that it would provide preferential subsidies to Gecamines which are not provided to the public sector, it is more costly to build these services up from scratch than to ensure that their assets are secured during a transition to private or public management. With regard to the stripping of assets, this occurred in the Zambian Copperbelt in Luanshya by a group that purchased a mine but did not have the requisite experience to manage it. Here the greatest risk would likely be with the medical facilities where the remaining equipment may have some value.
services (Kipushi, Mangombo, Kambove, Kakontwe, Kasonga, Kando, Luena). Schools and clinics that were once operated by Gecamines, but that are unlikely to be taken over by private or new mine companies, will need to be integrated into the public system and budgeted for.\(^{17}\) Parents need to be consulted and involved in this transition.

- A comprehensive strategy for how to support the diversification of the economy in Katanga, most likely in the agricultural sector, needs to be developed under the leadership of the Ministry of Agriculture, including applying the recommendations of the Katanga Regional Agricultural Conference. This should include the objective of increasing the level of extension services by a factor of four, so that it is in line with national averages, as well as an analysis of how to improve the functioning of input markets by decreasing taxation, and allowing free access to inputs.

- The range of rehabilitation and social funds that are active in the province need to be focused on the improvement of strategic routes for marketing agricultural production, specifically improving the road between Lubumbashi and Kolwezi.

- The number of projects with NGOs to support social capital formation, with some specific focus on those leaving the mining sector, should be increased. The impact of URK/COPIREP’s activities to encourage cooperatives, for example, points to the potential positive effect of such programs. Some of the former social services personnel of Gecamines, which used to have a staff of 150, could serve as a resource in such projects. One suggestion emerging from the June 2005 workshop was to reserve a portion of social funds specifically for reinsertion projects for partants.

- In negotiations on Gecamines’ debt, it will be important to ensure that the most vulnerable are given due consideration; specifically, there are widows of partants who claim that they did not receive final payment, retirees who have not been paid their pensions, and employees who have expressed concern because Gecamines has not been making deposits from their salaries into social security (INSS) and because of overall problems with this system.

- If continued mine sector reform involved restrictions to the artisanal mining, it would be important to, in tandem, integrate programs to ensure that the young that are currently employed have an opportunity to participate in training programs to work in the revitalized mines, and/or to participate in other labor intensive programs. This is likely to be central to continued stability in the region, and to moving forward on mine reform.

- To the degree possible, negotiations for mining concessions should press for mine companies to provide some community support and employment in areas where there are no other economic activities. Thus, for example, mining companies operating in isolated areas such as Kipushi could be encouraged to undertake or provide support for community programs such as malaria spraying, HIV-AIDS education, or training for local youth.

\(^{17}\) Certain key facilities are likely to be taken over or retained by a revived mining sector such as mine site clinics or occupational health facilities.
31. **Lessons for future restructuring programs**: The departures program was part of one of the first major parastatal reform programs in the DRC since 2001. Although the PSIA was not designed as an ex-post analysis, it can shed some light on issues that are also likely to arise in future programs. First of all, programs which affect staff that are geographically concentrated and isolated differ substantially from those that affect staff that are located within larger more diversified urban settings. For similar situations, with very large or very geographically concentrated parastatals, adequate attention should be paid to the towns that are most dependent on the parastatal, while in the more diversified and urbanized settings such as Lubumbashi, there is less dependence on the parastatal to begin with and thus the impacts are not as likely to be severe. Second, programs should invest up front in carrying out a baseline, and strengthen the institutional capacity at the local level to monitor the situation. Several short-term problems associated with the Gecamines retrenchment were solved because there was (a) a strong local project office and (b) there was an effort to coordinate among different stakeholders. Short-term subsidies for health and education played an important role in buying time for a slow adjustment for the families of retrenches, but longer term issues on the future of social assets requires a stronger institutional structure to deal with the transition and policy decisions that go beyond the authority of a local project office.

32. With regard to social services, one of the greatest challenges of such programs is the institutional vacuum that often occurs. The failing parastatal is often paralyzed from taking decisions, while potential private or public partners do not yet know the rules by which they can purchase assets or are hesitant to take over responsibilities (for example, for stretched government budgets). This requires a formal process framework, often with a specific committee on social services and the participation of direct stakeholders from the region and from line ministries, which can negotiate among parties and provide a clear framework and timetable for such decisions.

33. The appropriate long-term solution for social services requires a careful analysis of the needs based on accepted national standards health and education specialists; in future operations it would be wise to carry out such detailed sectoral studies which are location specific even prior to the departures program so that negotiations with line ministries or others can take place in advance of the necessity of such changes. Such analysis ensures that any short-term assistance or any long-term public assistance goes to the areas in most need, and avoids providing preferential treatment to specific groups.

34. The Gecamines experience also shows that reducing the staff size is only one part of restructuring, and that key management issues also need to be addressed in order to get the remaining company functioning again. In cases where remaining employees represent an important part of the population, getting their salaries paid again can provide an important boost to the local economy. Where it is feasible, the earlier that reinsertion programs can be put in place the better, preferably prior to the payment of departure programs. It is important to distinguish between different categories of workers, as some will be more vulnerable than others, and may require some special assistance. Existing safety net system should be targeted at these groups.
1. INTRODUCTION

Context

1.2 The World Bank has supported the efforts of the Government of the Democratic Republic of Congo (DRC) to increase the competitiveness of the economy through the reform of public enterprises in several strategic sectors, including the mining sector through both budgetary and project support (Private Sector Development and Competitiveness Credit (PSDC, Project No. P07114). Historically, perhaps the largest and most important public enterprise was represented by the Générale des Carrières et des Mines, or Gecamines which produced copper and cobalt. Given the wealth of Congo's mineral deposits, the mining sector has the potential to be a key factor in fostering general economic growth. Up until 1990, Gecamines had been the country’s most important source of foreign exchange with more than US$1 billion in revenues.

1.3 By 2003, Gecamines had fallen into bankruptcy, had accumulated substantial debt, had mines that were not operational because they had not benefited from any investment for years, and had not paid many of its employees for over two years. Accordingly, in 2003 the Government of the DRC decided that recovery of the mining sector could only be achieved with the restructuring of (i) Gecamines itself including retrenchment, and, (ii) of its welfare role vis-à-vis the communities in which it operates. Access to the country’s mineral resources was to be granted to foreign investors through the implementation of a mining code that was introduced in 2003, which was to provide clear parameters for the prospecting, exploration, processing and sale of minerals, including artisinal mining.

Objectives

1.4 In this context, the Government and the PSDC project team requested assistance in looking at the expected poverty and social impact of this reform. Indeed, such restructuring and retrenchment operations, as they have been carried out in various other mining basins in recent decades, are usually expected to carry significant social costs - directly and indirectly. As the retrenchment program moved forward more quickly than anticipated (initial departures took place during the first scoping mission for the PSIA), a model was adopted for this type of analysis which would place priority on feeding ongoing findings into a dynamic process. This shaped both the methods and the sequencing of work as is noted below under methodology. The objective of this PSIA was thus to identify expected risks, rather than to carry out an ex-post evaluation; this report summarizes this action research approach, and provides updates on the current situation where they are available.

1.5 Although the initial impetus for this PSIA was to inform the Gecamines retrenchment program, it quickly became evident during the scoping that the policy issues fell into two broad categories:

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18 As noted earlier, these figures are rough estimates and would require audits to be more precise.
(i) **Policy Issue 1 – Short-term**: Gecamines’s restructuring plan included the voluntary departure of about half of the company’s work force, about 10,641 workers (partants), to be paid for in part through funds coming from the Economic Recovery Credit, a structural adjustment loan that marked the re-engagement of the Bank in DRC after a ten year break. Partants received payments ($4,022 on average) through the second half of 2003. The restructuring plan also called for the hiring of a new international management team for Gecamines to help to restart production operations, though this would not occur until several years later. The key issues of inquiry focused on what the impact of this program might be, how to mitigate negative effects, and, according to the standard methodology for PSIA, whether the alternatives to restructuring were better or worse than the reform itself. Accordingly, a central question concerned the degree to which Gecamines’ degradation had already caused adjustments in income and services and whether the alternative of not restructuring would have been preferable.

(ii) **Policy Issue 2 – Medium-term**: From its inception during colonial times (as Union Minière du Katanga), Gecamines had always played a key role in the provision of social services in the Katanga region. However, the lack of financial results for over the past decade has translated into deteriorating conditions in its schools, health posts, and social services. Plans to restructure the sector included re-centering on the company’s core activity and competency (ore extraction and production of copper and cobalt metal), and minimizing its role as a social service provider. The DRC Government had set a timetable of 2 years for this transfer, but viable options for the future provision of these services still had yet to be defined. Upstream work on the degree to which Gecamines’ financial collapse has affected the provision of these ancillary services (and therefore the degree of impact from such a shift), as well as the design of mitigatory mechanisms and institutional options was essential as part of the PSIA.

**Methodology**

1.6 Because of the non-payment of Gecamines staff, there was pressure at the beginning of the voluntary departures program to accelerate the release of Gecamines staff. This proved challenging for the local project office responsible for implementing the departure and reinsertion program (URK/COPIREP), which had therefore to catch up with planning reinsertion activities, and also meant that the PSIA team prioritized feeding ongoing results into a dynamic planning process and building local capacity to monitor the reform. The team used and adapted existing surveys and data sources in order to provide timely advice to the team managing the departure operation (see Annex 1 on Methodology). The team therefore used and added questions to the following data sources:

(i) Quantitative data from a University of Lubumbashi (UNILU) baseline socio-economic survey of Gecamines and non-Gecamines households (482 Gecamines staff including those slated to leave and 118 households outside of Gecamines) which used the non-Gecamines staff and the remaining Gecamines staff as
control groups for those who would leave Gecamines. This was to serve as a baseline for monitoring the impact of the reform.

(ii) An ongoing exit survey of all voluntary departees. The PSIA research team included additional questions on this survey with selected questions administered to a sizeable sub-sample (over one third) of the "partants." These questions covered assets, indicators of social capital, human capital, other forms of capital, reinsertion plans and other issues relevant to the potential impact and baseline.

(iii) Focus groups, discussions and ongoing working groups which included at least 160 key informant interviews with a wide variety of stakeholders in each mining center (South- Lubumbashi, Central – Likasi, and Western – Kolwezi).

1.7 Focus group discussions were held with the following groups in all three mining centers:

- Voluntary departees, or "Partants"
- Employees staying at Gecamines
- Widows of "partants"
- Wives of "Partants"
- Children of "Partants"
- Gecamines retirees
- Representatives of parent-teacher committees
- Representatives of the electricity and water utilities
- Delegates of FAO, Pact-Congo, UNICEF, OMS, World Vision
- Political and administrative authorities, and sectoral provincial authorities for health and education
- Various staff of departments within Gecamines including those in health and education services

1.8 There were two key constraints which influenced the methodology: As noted above, the work needed to feed into a fluid process that was unfolding quickly; second, the fact that DRC is emerging from a long period of instability and war limited the type of data sources available – for example, there was no census from which one could draw a sample frame. In addition, researchers were not familiar with standard statistical programs. Thus, instead of spending valuable time quantifying income, in order to calculate changes in income from prior to and after the restructuring program, the research focused on key indicators (such as meals per day) that would be easier to measure, and on the identification and mitigation of risks.

**Process Framework**

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19 Three strata representing the three major geographical centers of Gecamines, were further stratified by professional grouping – higher level staff of directors and managers, and less skilled blue collar workers. In addition, the groups were stratified by whether they were leaving Gecamines, whether they were staying at Gecamines, and non-Gecamines salaried and non-salaried workers.
1.9 Workshops were held in each mining center to discuss preliminary results, and a multi-stakeholder working group based in Lubumbashi used the available data to complete a logical framework focused on how to adapt programs and policies to minimize the social impact from Gecamines failure and from the departures program. These stakeholders included political and administrative authorities (governor’s office, provincial health and education authorities, central bank), service departments such as the electricity and water utilities, groups of vulnerable departees such as widows, retirees, and departees themselves as well as those remaining at Gecamines, members of cooperatives, NGOs, Unions, churches, private sector and banks, police and tax authorities.

1.10 All of this led to the integration of recommendations both from the very early PSIA scoping work and from the ongoing work by the University of Lubumbashi (see Chapter 3 below) into ongoing operations.

1.11 In addition, the PSIA team collaborated with the University of Lubumbashi to provide training to professors, students, and others on statistical methods for monitoring the impact of mine reform. A database and ex-post analysis of a similar retrenchment operation that had taken place just across from Katanga in the Zambian national copper mines (ZCCM) was used to illustrate the concepts of isolating cause and effect, establishing baselines, and assessing the impact of interventions such as job training programs.

1.12 Finally, sectoral working groups were formed both in Katanga and in Kinshasa (on health, education, reinsertion and other ancillary services including electricity and water) to develop operational policy recommendations based on the results of the University’s analysis and to gain national attention for these issues. Subsequently, in June 2005, COPIREP and the University of Lubumbashi held a two-day national level workshop in Kinshasa which allowed stakeholders from Katanga to discuss policy options directly with national level stakeholders. Of note, several key union members participated, parents committees, retrenched workers, regional health and education authorities, Gecamines social services representatives, numerous sectoral ministries (Health, Education, Portfolio, Finance, Mining, Energy etc.), those responsible for the PRSP and donors. The sectoral working groups had met during the previous month to discuss the draft reports and to provide detailed comments; this enhanced the quality of the discussions during the plenary workshop. Participants noted that they had a better understanding of the potential options for social services, and of the degradation that Gecamines’ failure has engendered. (see Annex 4 National Workshop).

**Historical Context for Mine Sector Reform**

**National Context**

1.13 The DRC is one of the largest countries in Africa, with a total land area of 2.3 million square kilometers. The country knew 32 years of autocratic rule under Mobuto Sese Seko (1965 to 1997). With the end of the Mobutu regime, came civil war which brought the intervention of multiple foreign armies (Rwanda, Uganda, Angola, Zimbabwe), and the loss
of at least 3.3 million lives.20 The Katanga Copperbelt, because of its southernmost location, was largely spared the direct devastation of war, but suffered from the general disruption associated with being part of a failed state. The government at the time of the voluntary departure program was headed by President Joseph Kabila and four Vice Presidents representing the main factions engaged in the conflict. The first democratic elections since 1961 were recently held in the Congo.

1.14 Macroeconomic indicators had steadily deteriorated in the DRC since the early 1990s, and then started to improve around 2003 (growth rates of 6% per annum since 2003, increases in government revenues from 5% of GDP to 9% of GDP, still among the lowest in Africa). Recent improvements in macroeconomic performance nonetheless, came on top of a long period of steady decline and thus DRC remains one of the poorest countries in the world in spite of its rich endowment of natural and mineral resources. Gross domestic product had fallen from about US$10 billion in 1990 to approximately US$4.1 billion in 2002. Per capita income had declined steadily from about US$ 380 in 1985 to US$ 250 in 1990 and to US$ 87 in 2001 (to about $100 in 2004). Life expectancy stands at 45 years. In 2000 DRC’s fiscal deficit amounted to 10 percent of GDP, including external arrears. Because of the high fiscal deficit, inflation increased during the 1990s, as the government resorted to printing money to meet its expenses. Export earnings declined by about 70 percent during the 1990s, a great deal of it being explained by the collapse of Gecamines production. The current account deficit increased from about 7 percent of GDP in 1996 to nearly 18 percent of GDP in 2000.

1.15 The deficit has been financed mainly by the accumulation of arrears on external debt which was substantial at the time of the departures program. The total external debt in 2003, after the Club de Paris, was about US$ 9.6 billion. Internal debt is estimated at US$ 3 billion with about two-thirds incurred since 1997. On-lent external debt to Public enterprises alone stood at US$ 860 million as of March 2003. Debt service as a percent of government revenues before grants remained at over 20%.21

1.16 Although mining has generated most of the DRC’s export earnings and government revenues, agriculture is the country’s most important sector in terms of employment and share of national economic output. Nearly two-thirds of the Congolese rely on agriculture, animal herding and fishing for income and food, most using traditional methods to produce food that they consume themselves. Reflecting the general economic collapse, agriculture’s share of GDP rose from 30 percent in 1990 to nearly 60 percent in 1999. While agriculture’s share in national output had grown during the past decade, agricultural output had fallen sharply, from US$ 3.4 billion in 1990 to US$ 2.1 billion in 2000.

1.17 The prolonged period of conflict and economic decline has led to a severe lack of maintenance and investment in basic infrastructure which will continue to constrain economic revival;22 as a result, supply chains have been disrupted and there has been steady

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21 Ibid.
22 Today fewer than 50 percent of urban dwellers have access to piped water, and in some cities fewer than 10 percent of residents do.
deterioration of roads, bridges and other transport infrastructure. Markets are no longer connected and farmers can neither purchase agricultural inputs nor readily sell their products. For example, in Lubumbashi, in spite of good agricultural potential, residents still purchase maize from neighboring Zambia. As a result agriculturists are increasingly cultivating subsistence crops, and food in cities is scarce and expensive. It is estimated that the poor state of the 350-kilometer main road between the port of Matadi and Kinshasa city adds an average of 40 percent to the price of goods in Kinshasa markets.

**Regional Context and the Significance of the Mining Sector**

1.18 Gecamines’ operations are largely concentrated in the mining belt within the Katanga province, an area hosting about one third of the provincial population of 6.5 million, out of DRC’s 52 million inhabitants. Its most important products were copper and its byproduct, cobalt, of which deposits cover at least 1,500 km2 and are among the richest in the world. Known copper ore grades run two to eight times the grade of typical copper ore mines in North and South America, though in South America technology is more modern, leading to more efficient extraction. The Katanga also has deposits of manganese, cassiterite, gold, uranium, cadmium, coltan and germanium.

1.19 Cobalt is used in a variety of industrial and military applications, the most important of which are in the construction of jet engines, in superalloys and batteries (see Annex 2). Roughly one quarter of the world’s 48,400 tons of cobalt production comes from the DRC, and about 20% from neighboring Zambia. However, these figures do not account for illegally mined cobalt-rich concentrates that have increasingly been produced by artisanal miners, concentrates that are eventually exported to China and other high-demand countries.

1.20 The significance of the cobalt market lies in the opportunities that it presents for DRC’s potential future income; there are an estimated 7 million tons of cobalt reserves, of which DRC reserves represent the largest share with 36.2% (Zambia only accounts for 5.2% of the world cobalt reserves) – see Annex 2 on the Cobalt Market. In terms of copper, DRC has the second largest world reserves (10% of the total) after Chile (30% of the total). Starting in 2003, cobalt prices increased significantly due to a drop in supply and an increased demand from China and Japan in the rechargeable battery sector. The demand in Asia has increased significantly in recent years.

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23 Cobalt Facts, The Cobalt Development Institute
24 It does not include the hypothetical and speculative cobalt resources that exist in manganese nodules and crust on the ocean floor.
25 In 2003 approximately 3,600t to more than 4,000t of illegally mined cobalt-rich concentrates have been produced by artisanal miners and exported to China and other countries. It was not possible to obtain an estimate of the quantity of Congolese Cobalt being transferred to Zambia and sold as refined Zambian cobalt. Source: US Department of the Interior, US Geological Survey, Mineral Yearbook 2003
26 US Department of the Interior, US Geological Survey, Mineral Commodity Summaries, January 2005. According to the University of Lubumbashi team, the share of cobalt reserves in DRC is even higher, accounting for 80% of world reserves.
28 China’s cobalt consumption increased by 30% in 2003
1.21 After coming into power in January 2001, Joseph Kabila affirmed his commitment to restore peace, to improve living conditions in the country and to liberalize the economy. As part of its general economic reform agenda, the Government has adopted a step by step strategy for public enterprise reform; its first steps were to order an analysis of the major public enterprises - among which is Gecamines, to install a steering committee in charge of the implementation of the reform (COPIREP), and to decide the replacement of the public enterprises' top managers by international interim administrators.

1.22 The 2004 World Bank Economic Sector Work on reforming public enterprises in the DRC notes that “implementation of a straightforward privatization program in all sectors at the same time and immediately, would generate high risks since:

- Market response would be limited, if any, given the poor investment climate and perceived political risks;
- Such a program might lead to additional corruption;
- Failure to address social needs might lead to additional hardship and opposition, hence delaying the overall reform process;
- The political leaders would take high risks in trying to implement an outright privatization program in the coming two years and would not necessarily want to risk popular support in engaging in this during the transition period.”

1.23 The consulting firm IMC submitted an analysis of Gecamines to the Government in the Fall of 2003. At that time, the situation of the enterprise could be summed up through three main observations: 1/ managerial ineptitude, coupled with strong interference of the Ministry of Mines and of the political establishment; 2/ high risk of dislocation of the assets of the company, given current pilfering and embezzlement; and 3/ possibility for a rapid industrial restart within 12 – 24 months at production levels of 100,000 tons for copper and 6,000 tons for cobalt, but only if the appropriate decision making structure is put in place. Specifically, the analysis recommended that an international team of mine experts be brought in to replace the existing management team. It also recommended that all current partnership agreements be renegotiated and that a new company, fully owned by Gecamines, be created to regroup all the core viable mining and metallurgic activities and be kept insulated from the type of political interference which law 78/002 turned into a system (while waiting for that law to be replaced by a more coherent legal framework). This strategy could then lead to foreign investments being brought in within the context of a 5 and 10 year industrial development plan, and on terms that would be more favorable to Congolese national interests.

1.24 According to that plan, Gecamines would be holding all the non-industrial assets, and particularly those related to the health, education and social functions which the company had progressively taken on over the years, and would be in charge of externalizing all these activities. There was, however, no study nor any exit strategy defined yet for these

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activities, although the principle of divesting Gecamines of this social infrastructure seemed to have become common wisdom among Gecamines management. At the initiation of the PSIA, Gecamines' health and education departments stood in limbo, without a transition and recovery strategy. Further, the uncertainty of the future of these assets weighed both on staff of the schools and clinics, and on children, parents, and clients of these social services.

1.25 The most important action taken for the restructuring of the Gecamines had been, so far, the implementation of the Government's decision to retrench part of the company's workforce as noted earlier.

1.26 **Update:** Since the initial PSIA analysis, and since the discussion of the PSIA findings in Kinshasa in June 2005, more detailed studies of the Gecamines health and education sectors have been completed under financing of the PSDC project and audits are being carried out to ensure that the analytical base for updating the Gecamines restructuring plan is sound. The political environment has also evolved, with more investors becoming involved in the mining sector. These studies should help to provide a basis for discussion of the future of Gecamines' social services with a broad array of stakeholders. In addition, a significant number of investment projects in the mining sector in Katanga - with Gecamines and with others – have been developed. Therefore, it is an opportune time to discuss the relationship between the mining sectors and social sectors.
2. IMPACT OF GECAMINES COLLAPSE

2.1 The PSIA found that the overwhelming social impact in the Katanga region stems from the long decline in Gecamines’ financial situation. This is comparatively more important than the impact of the voluntary departures program, which sought to, in part, address this financial imbalance. Today, most Gecamines employees are paid on time compared to 2003.

History of Gecamines

2.2 In the 1980s Gecamines appeared to be a successful mining company, producing a little less than ½ million ton of copper and about 14,000 tons of cobalt from the Katanga’s rich and large mineral deposits, generating external revenues of about $1 billion a year. By 1990, the company had 35,000 agents, supporting a total number of employees and dependents of 258,000. It provided its employees with cradle to grave benefits, which included free education and free health care for family members, monthly food distributions, free housing, water and electricity, free recreational facilities, cheap loans, a retirement package, free burials, social welfare services, etc. The monthly pay, as one employee explained, was basically pocket money. Many of these benefits were justified by the need to maintain a well trained and stable workforce for Gecamines’ complex industrial operations, in an environment characterized by a rural economy and a traditional social and cultural system.

2.3 In 1990, the mine of Kamoto near Kolwezi collapsed, bringing production levels down from over 400,000 tons per year to around 150,000 tons per year. This collapse was the logical consequence of systematic disregard of security norms in an attempt to increase extraction levels and speed. But this was not an isolated problem, and many other management issues affected the company and contributed to its rapid disintegration. A clear sign of the systemic dis-functionality could be seen in the very low level of investments, which had been neglected for many years; as a result equipment and installations at the end of the 1980s were already old and obsolete, compromising productivity in all aspects of production.

2.4 If the collapse of Kamoto was brought about by factors internal to Gecamines, outside factors and events further precipitated the complete collapse of the company itself. These factors and events were all linked to the continuing degradation of the political situation and the inability of Gecamines, as a public enterprise, to isolate itself from the predatory behavior of the government apparatus at that time. As the country grew more isolated after 1990, members of the Mobutu family regularly came to appropriate the company’s production, taking directly possession of the copper and cobalt metals.
Table 1: Evolution of Key Indicators of Gecamines

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper (Tons)</td>
<td>465,000</td>
<td>60,000</td>
<td>64,706</td>
<td>44,000</td>
<td>19,000</td>
<td>9,105</td>
<td>12,150</td>
</tr>
<tr>
<td>Zinc (Tons)</td>
<td>12,500</td>
<td>9,000</td>
<td>6,000</td>
<td>6,000</td>
<td>1,800</td>
<td>2,140</td>
<td>7,762</td>
</tr>
<tr>
<td>Cobalt (Tons)</td>
<td>6,500</td>
<td>5,500</td>
<td>7,924</td>
<td>6,000</td>
<td>1,800</td>
<td>2,140</td>
<td>7,762</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper USD/T</td>
<td>2,655</td>
<td>2,623</td>
<td>1,717</td>
<td>1,520</td>
<td>1,800</td>
<td>1,859</td>
<td>2,188</td>
</tr>
<tr>
<td>Zinc USD/T</td>
<td>1,536</td>
<td>1,035</td>
<td>1,035</td>
<td>860</td>
<td>Na</td>
<td>Na</td>
<td>Na</td>
</tr>
<tr>
<td>Cobalt USD/Lb</td>
<td>8</td>
<td>26</td>
<td>27</td>
<td>10</td>
<td>7</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Other Indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Force</td>
<td>36,500</td>
<td>27,942</td>
<td>21,704</td>
<td>23,508</td>
<td>23,730</td>
<td>12,765</td>
<td>12,765</td>
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<tr>
<td>Annual Inflation</td>
<td>362%</td>
<td>136%</td>
<td>532%</td>
<td>138%</td>
<td>17%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Social insurance + Social benefits Millions of $US</td>
<td>243</td>
<td>57</td>
<td>77</td>
<td>86</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Spare parts and maintenance in Millions $US</td>
<td>457</td>
<td>190</td>
<td>203</td>
<td>143</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Entrepreneurs associated with GCM</td>
<td>142</td>
<td>50</td>
<td>79</td>
<td>68</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>108 its/Lb</td>
<td>133</td>
<td>86</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Productivity per worker (tons per worker)</td>
<td>14 T</td>
<td>2.1 T</td>
<td>2.9 T</td>
<td>1.8 T</td>
<td>0.8 T</td>
<td>0.7 T</td>
<td>0.9 T</td>
</tr>
</tbody>
</table>


2.5 In order to distract attention from the mounting political opposition which had found itself invigorated with the “National Conference” of 1992, Mobutu purposefully ignited latent tribal antagonisms. In 1993 the governor of Katanga ordered the expulsion of 300,000 Kasai from the province (the Kasai were parked in camps next to the railway for months, and many died during the transfer). Among them were 7,500 Gecamines employees (7,000 blue collar, or MOE and 500 managers/directors, or MOC32), who were dismissed from the company and ordered to leave. The expulsion of the Kasai further contributed to the disorganization of production.

2.6 Also in 1993 the government started to orchestrate the systematic stripping of economic assets in the country and in the Katanga, with the assistance of the army – a movement called the “mitraille” (for a term which means metal). Orders came directly from

31 The Katanga mining basin was scarcely populated when the Belgian colonizers were developing the mining activities of the Union Minière du Katanga, and furthermore the local population was not willing to be enrolled in industrial work. The Belgians thus went to the Kasai, which had a much larger population. As all migrants who strive to succeed and build a new life, the Kasai proved to be open to the industrial culture and to be hard working and dedicated. Cities like Kolwezi, Likasi and Kipushi had large Kasai populations (30% of the population in Kolwezi was originally from the Kasai). In Kipushi, the population resisted Mobutu's political manipulation and very few people left; most of the Kasai Gecamines employees who left were from Kolwezi and Likasi.

32 MOEs are non-managerial employees, MOCs are managers and directors.
Kinshasa, and a witness recalled seeing instructions being transmitted to local authorities in the Katanga through the offices of the Central Bank. If individuals were simply stealing copper crosses in cemeteries or removing radiators from trucks, other elements of the movement were often well organized and planned: For instance, in one evening 25 kms of high voltage cable (weighing about 10 kg per meter) were stolen between Kolwezi and Likasi. The “mitraille” movement lasted until the last days of the Mobutu regime and further disorganized and paralyzed production. After the change of regime in 1997, and through the ensuing civil war (which did not touch the mining basin), production kept going down, to reach just over 9,000 tons in 2003.

**Figure 1: Gecamines Copper Production**

<table>
<thead>
<tr>
<th>Years</th>
<th>Production (Tons x 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>500</td>
</tr>
<tr>
<td>1988</td>
<td>450</td>
</tr>
<tr>
<td>1990</td>
<td>400</td>
</tr>
<tr>
<td>1992</td>
<td>350</td>
</tr>
<tr>
<td>1994</td>
<td>300</td>
</tr>
<tr>
<td>1996</td>
<td>250</td>
</tr>
<tr>
<td>1998</td>
<td>200</td>
</tr>
<tr>
<td>2000</td>
<td>150</td>
</tr>
</tbody>
</table>

2.7 Throughout this period of decline, and even though production levels had been reduced at the end by about 96%, Gecamines’ social costs remained fixed: in early 2003 there were still 23,000 employees on payroll, food was still being distributed (although to much diminished levels and very irregularly), its hospitals and schools were still running, and there was still free water and electricity for its employees. Instead of restructuring, the company continued to exist by accumulating debt; although it is challenging to detail with certainty until there have been exhaustive audits, there were some estimates of Gecamines’ debt in 2003 equaling roughly US$1.6 billion (of which about $800 million in financial debt, about $420 million in debt to suppliers such as the railway company, the electricity, and water utilities, and about $100 million in debt to employees in unpaid wages prior to the retrenchment operation). As noted earlier, these figures are approximate estimates, and would require audits to be precise.

33 Given the predominant role of Gecamines, particularly in Kolwezi and Likasi, the impact of its decline goes well beyond affecting only its employees, and is ultimately a much more significant factor than the voluntary departures program alone. In addition, a real cost was the lack of investment in Gecamines production system, or in its education, health and social systems. As a result, what was once a well endowed province has suffered from degraded infrastructure as is detailed in later sections of this report.
Factors of Gecamines Decline

2.8 Gecamines’ collapse can be largely traced to institutional factors, rather than an exhaustion of its deposits or to a downturn in international markets. Key among these factors were its decision making structures as a public enterprise, governance issues vis-à-vis the state and a change in the international political environment. The logical consequences of this assessment are that there might indeed be an economic future for a mining industry in the Katanga, but also that the very problems which have beset Gecamines may well undermine the reconstruction efforts (as well as any plan for a transition) if mine governance issues are not addressed.

2.9 Gecamines had become a public enterprise in the early 1970s during the “Zairinisation,” the process by which all the major private economic assets were transferred to the State, and put under national management (instead of expatriate managers). Public enterprise management became defined by Law 78/002, which gave complete control of the enterprises to politicians and, most importantly, to the President. Public enterprises were managed on a day to day basis by a Management Committee, headed by a General Deputy who was nominated by the President and who could be revoked at will, as were the members of the Board of Directors, all of whom were generally chosen in the direct entourage of the President and usually had no experience of industrial management. All important decisions had to be approved by the relevant Ministry (here the Ministry of Mines), and some decisions could only be taken by the President himself (such as sale of assets, mid to long term loans, large procurement contracts, etc.).

2.10 The absence of an investment strategy mentioned earlier was emblematic of a lack of long-term industrial strategy. The decision-making structures of Gecamines, it is important to note, precluded the creation and implementation of policies based on strict market rationality. The company was not a private entity, nor a publicly-owned company with independent management that would have been able to respond to or anticipate market signals; it was a public enterprise that was government-managed, and whose main function as such was to respond to short term incentives, namely to provide the State and its dignitaries with rents. The absence of a political environment of accountability, meant that there were few checks on this process. The Governmental stakeholders who benefited from Gecamines’ wealth extended beyond the Mobutu regime; the Provincial government, for instance, had its fleet of cars fuel up with Gecamines’ gas, while the Army regularly requisitioned vehicles that were never returned and obtained the free use of about 400 Gecamines’ houses for its officers.

2.11 1990 marked a notable shift in the support the international community had until then given to the Mobutu regime, and was followed by a period of isolation and suspension of most aid until 2002. During this period there was no internal or external movement to reform Gecamines, nor other failing public enterprises such as the Société Nationale des Chemins de Fer Congolais (SNCC), which were allowed to go further into debt. The onset of the civil war further mobilized all attention away from Gecamines’ problems.
2.11 Even in 2003, the legacy of past administrations was that decision-making remained highly centralized, and decisions which have an economic impact (and particularly an impact on the flow of funds) were still often being taken in Kinshasa. In 2004, provincial governors were still appointed by the central administration, and decisions concerning the management of the Gecamines (except for the most mundane and day-to-day processes) were being taken by the Ministry of mines or/and the President himself. In this context, it is important that in the evaluation of the future role of social services, local level stakeholders who are directly affected are able to participate in decision-making.

**Impact of Gecamines’ Collapse on the Regional Economy**

2.12 Gecamines remains the largest formal employer in Katanga, followed by the railway (SNCC) and thus the region remains highly dependent on mining. Within the three major mining centers of the Katanga mining basin (Lubumbashi, Likasi, Kolwezi) there are, nonetheless, gradations in terms of economic and social dependence on Gecamines. Lubumbashi has the most diversified economy, and therefore has a greater degree of protection from the failure of the mine company than do either Kolwezi or Likasi. The partants and their families represent only 2% of the overall population in Lubumbashi compared to 10% in Likasi and 7% in Kolwezi. Kolwezi is particularly isolated, being connected via a road that has fallen into disrepair. This has implications for the capacity of the town to engage in alternative activities such as agriculture, in which it needs to obtain inputs (see section on agriculture in Chapter 2).

2.13 In 1990 there were at least 120 formally registered entrepreneurial firms providing services to Gecamines; in 2005 there were none. Local firms have been burdened with Gecamines debt (a local entrepreneur -Swanepoel- operating mostly in the region of Likasi, reports a $19 million claim with Gecamines for unpaid contract work). However, artisanal mining services have increased in Kolwezi, the center for cobalt reserves, and to a lesser degree in Likasi, though the type of remuneration and service associated with these informal enterprises are vastly different from that of a formal enterprise and are employing, by and large, younger workers [See Box 6]. New companies focused on mine processing and mining were starting to work in the larger cities (Bazano in Likasi, Chemaf and Somika in Lubumbashi which employ 750 workers and 2000 daily contract workers in the three basins). Since the year 2000, there have been about 183 new commercial entities created, with the majority in commerce, services, and agriculture..36

2.14 Similarly municipalities were extremely dependent on revenues and informal support from mines, and over the period of Gecamines decline saw their revenues decline drastically with a consequent decline in the provision of municipal services; this has been the result of the disappearance of revenues drawn from Gecamines's activities, but also from failure of

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34 According to the exit interviews data, the partants have on average 8 dependents, and 20% of them have declared more than 10 dependents. There is a slight decrease in the number of dependents as the head of the household gets older: partants who are less than 55 years old have 8.6 dependents on average, while partants over 65 report only 6.3 dependents.

35 Source: UNILU Report 2005. Also to note that the current regulations for small business discourage formal declaration. All registered companies have to pay an annual tax of $5,000 US, regardless of their profit level. Individual corporations have to pay US$250.

the State to honor its commitments (itself partly a result of the disappearance of revenues from Gecamines). In 2003 Lubumbashi got only 2.39% of the tax retrocessions which were owed to it according to the law, and as a result had to function with an annual operating budget of 3,239,965 Francs Congolais, or $8,640, for a population of about 1.5 million. Mayors are thus generally left to their own devices to provide stopgap measures. In Lubumbashi, the mayor instituted a special tax on beer consumption to pay for road repair. The mayor of Kolwezi, using a little known provision of the tax code, created in 2002 a tax on the collection of heterogenite (from which cobalt is derived).

Impact of Gecamines Decline on Ancillary Social Services

The Health Sector - Dependence on Gecamines

2.15 Gecamines played a predominant role in secondary health care for the overall population. In fact, because the company took over the major hospital, Sendwe, when it was experiencing problems, the number of non-Gecamines users of the hospital is much larger than those from Gecamines—serving over 1 million people in 2004; 40% of consultations in Gecamines hospitals were from non-Gecamines staff and 60% of hospitalizations were from those outside of Gecamines and 30% of the laboratory work performed at Gecamines was for non-Gecamines clients. Gecamines hospital beds represented 65% of all hospital beds in the South (Lubumbashi), 42% in the center (Likasi) and 47% in the west (Kolwezi). In places such as Kipushi, the Gecamines hospital serves as the only reference hospital for the health zone.

<table>
<thead>
<tr>
<th>Gecamines Health Infrastructure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals (including Sendwe)</td>
<td>8</td>
</tr>
<tr>
<td>Clinics (including three mini-clinics)</td>
<td>6</td>
</tr>
<tr>
<td>Suburban Clinics</td>
<td>19</td>
</tr>
<tr>
<td>Work Clinics (occupational health)</td>
<td>18</td>
</tr>
<tr>
<td>Health Centers</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2: Gecamines Health Infrastructure 2003/4

Declining quality of health care

2.16 One side effect of the financial disarray of Gecamines can be found in the paucity of accurate or audited financial data. Although these figures have not been audited, according to the Gecamines's health department, its deterioration over time can be traced to its financial insolvency as illustrated by a few key figures: in 1990 its operating budget was $30 million (not including $5 million for salaries) and has steadily declined down to $0 in 2003. Its investment budget had dropped from $2 million in 1990 to $1.6 million in 1996 to $0 in 2003 (see Figure 2). The number of doctors declined from 110 in 1989 (including 2

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37 This operating budget has to be apportioned between city hall and the seven communes that constitute the city.
cardiologists, 3 orthopedists, pediatricians, etc.) to 69 in 2004, and many of the better trained specialists have left (often for South Africa, where people with money now go for health care). Lack of investment also resulted in a decline in the number of hospital beds; while there were 1077 Gecamines' hospital beds at Sendwe hospital in 2002, this dropped to 959 in 2003 and 770 in 2004, or about a 30% decrease in three years.

2.17 The voluntary departures program itself had an impact on the quality of service as 40% of its medical staff left during the program. This is further discussed in Chapter 3. This decline is perhaps most acutely felt by those who knew Gecamines during the height of copper production as this represents a descent for what was one of the most privileged health services; Gecamines used to send its most difficult cases to Europe on its own sanitary plane.

Table 3: Trends in Gecamines’ Health Care 2000 - 2003

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Functional Beds*</td>
<td>3103</td>
<td>2787</td>
<td>2743</td>
<td>2385</td>
</tr>
<tr>
<td>External Consultations</td>
<td>734,431</td>
<td>797,494</td>
<td>578,904</td>
<td>286,179</td>
</tr>
<tr>
<td>% of Deaths of those coming to hospital</td>
<td>3.7</td>
<td>3.9</td>
<td>5.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>

* Meaning with some form of mattress.

38 40 doctors left in 1991, when the Kasai were expelled from the Katanga; 8 left in 2003 in the context of the Opération des Départs Volontaires (some doctors were hired after 1991). The last three expatriate doctors on staff have quit in 2001.

39 This deterioration has reportedly also affected the quality of medical training, as medical students do not get appropriate teaching or training and are not sanctioned for their lack of knowledge, exams being allegedly “doctored” to allow a sufficient number of students to pass into the next level of study.
2.18 Gecamines’s health benefits used to be very generous, providing free drugs to employees (according to a Gecamines health official this free supply had generated a small reselling business for the most common drugs such as cough syrups) and to a very loosely defined extended family. There are anecdotal reports of even distant relatives being able to participate in the free medical care, including grandparents, grown siblings, in-laws, aunts and uncles. Thus the number of people who used to benefit from these services goes well beyond the estimated 190,000 or so (in 2003 prior to departure) immediate dependents. In 2003/4, because of the company’s financial problems, the Gecamines’ health sector was unable to provide drugs (see the decline in the drug budget in Figure 3 below) which patients had to procure themselves.
2.19 The cost of the deteriorating fiscal situation, combined with the ambiguity of the future status of the health services has been a tangible decline in service quality (no materials, absent staff). As a result, fewer people went to Gecamines’ centers for consultations in the last several years. According to the head of Gecamines's health department, “only those who are really sick now come to the hospital.”

40 Because hospitals used to provide free medicine, there used to be a small traffic of medical drugs, patients reselling the drugs they had received (such as cough medicine).
Discussions with Gecamines health personnel reflected the following trends in tandem with Gecamines’ financial decline (up until 2005): Doctors used to have transport, but now the surgeon has to go home in a taxi and/or pay for fuel themselves and has no radio with which to request transport. As a result, doctors come to work less often than before. Until recently, there was no separate accounting at the hospital as all accounts were managed by the central accounting department for GCM and they would code their expenditures. It has been difficult for GCM management to enforce the rule that doctors are not allowed to work in other places, even during the day, as during 2003 and 2004 they had not been paid and work conditions were deteriorating.

The impact of the budget drop has affected more than just the patients, but the public service elements of their activities;

- They used to spray for malaria, which stopped in 2002. Malaria rates have increased.
- Doctors noted that TB has come back in force
- Hygiene campaigns for the entire community have not taken place since 2003

In reaction, small neighborhood dispensaries have emerged but GCM remains the only source with technical expertise in radiology, laboratory, operations. GCM health staff looked towards the model of NGOs who had signed contracts with the Ministry of Health.

In 2004/2005, GCM health facilities instituted fees for services which are kept at the hospital/clinic level – previously payments by non-Gecamines patients was not strictly enforced. They hope that this will allow them to purchase drugs and ensure a better service level.

2.20 In reaction to the increasing costs and declining quality of health care, patterns of medical consumption are changing in a manner which is less neutral in terms of income distribution, particularly for lower level workers, those who remained at Gecamines but had not been paid, and dependents of both miners and ex-miners. People who can afford it now go to the private clinics, where they often are treated by Gecamines doctors, and those who can afford to go abroad; others revert to traditional medicine, only going to the hospitals when the situation has become extremely serious (a trend reflected in the rising number of “dead on arrival” in hospital statistics), or ignore all medicine altogether and attempt to find a cure for their ailment in prayer groups (Pentecostal or even Catholic), whose numbers have reportedly risen dramatically. The areas most at risk from this decline are those with fewer alternatives, listed below.

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41 From 1998 on, as arrears started to accumulate, Gecamines doctors began to go into private practice to make ends meet - with the implicit approval of the direction (even the head of Gecamines’s medical department has a private practice to which he goes after his 8 AM- 4 PM unpaid workday in the office).
Table 4: Localities with highest dependence on Gecamines' health facilities

<table>
<thead>
<tr>
<th>Locality</th>
<th>Gecamines zone</th>
<th>Estimated population</th>
<th>Distance from regional center (km)</th>
<th>Regional Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kipushi South</td>
<td></td>
<td>60,000</td>
<td>30</td>
<td>Lubumbashi</td>
</tr>
<tr>
<td>Mangombo Center</td>
<td></td>
<td>1,200</td>
<td>30</td>
<td>Likasi</td>
</tr>
<tr>
<td>Kambove Center</td>
<td></td>
<td>20,000</td>
<td>30</td>
<td>Likasi</td>
</tr>
<tr>
<td>Kakontwe Center</td>
<td></td>
<td>10,000</td>
<td>15</td>
<td>Likasi</td>
</tr>
<tr>
<td>Kakanda Center</td>
<td></td>
<td>10,000</td>
<td>60</td>
<td>Likasi</td>
</tr>
<tr>
<td>Kasonga West</td>
<td></td>
<td>1,000</td>
<td>150</td>
<td>Likasi</td>
</tr>
<tr>
<td>Kando West</td>
<td></td>
<td>1,000</td>
<td>170</td>
<td>Likasi</td>
</tr>
<tr>
<td>Luena West</td>
<td></td>
<td>10,000</td>
<td>250</td>
<td>Kolwezi</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>113,200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GCM Departement Medico-Sociaux

2.21 The impact of this decline in service quality on health indicators was cited systematically in numerous discussion groups and interviews, but is more difficult to verify and attribute the source of impact (worse service quality versus impact of overall economic decline on health) given the paucity of statistical data during the period of conflict. It is clear, however, that the Katanga province, which used to be among the richest and healthiest, has declined substantially in terms of key indicators. According to a UNICEF report in 2000/2001, the level of moderate or severe malnutrition in Katanga province was 15% compared to 13% nationally. Recent data on maternal mortality indicate that the rate of maternal mortality during birth increased from 20.4 0/000 in 2000 to 88.1 0/000 in 2002 and in Likasi, reached 173.6 0/000. Similarly, the number of still-born children increased dramatically in Lubumbashi, from 138 in 2000 to 445 in 2001 (when the number of registered births only increased by 7.25% during the same period). However, according to the provincial director of the Institut National de la Statistique, these dramatic figures may stem from a change in data collection and the decision to include in the survey small health centers located in poor neighborhoods which were ignored until then.

Table 5: Malnutrition among children under 5 years of age (Katanga)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate or severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Katanga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malnutrition acute</td>
<td>15.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Malnutrition – chronic</td>
<td>38.3%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Low weight</td>
<td>32.9%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

2.22 **Update:** A protocol to subsidize the operating costs of the Gecamines medical department was negotiated under the PSDC project to cover the period of December 1, 2004 to May 31, 2005 with a second tranche from August 15, 2005 to February 15, 2006. After that time, patients would be treated like all external clients, and be required to pay for medical services in cash. About US$198,342 and $96,420 was disbursed between these two time periods for this subsidy. 42

**The Education Sector – dependence on Gecamines**

2.23 It is notable that in 2003/4, there were almost twice as many students in the mining basin in Gecamines’ schools as there were in all public primary and secondary schools in the basin (see Annex 3 on Education) – or about 48,000 Gecamines primary and secondary students compared to 27,000 public primary and secondary students. 43 This is one reflection of the weakness of the state in Katanga given the historically dominant role Gecamines has played in the region. Only 5% of primary school students and 18% of secondary school students in the mining basin were enrolled in public schools. Gecamines students (primary, secondary and special schools for developmentally challenged children) represented a significant share of students in the mining basin in 2003/4: 44:

- 16% of secondary school students in the mining basin are in Gecamines’ schools
- 20% of primary school students in the mining basin are in Gecamines’ schools

2.24 However, these figures do not fully reflect the concentration in certain towns. In Kolwezi, 37% of primary school students are in Gecamines’ schools. In Likasi and Kolwezi 20% to 22% of all secondary school students are in Gecamines’ schools.

2.25 **Update:** According to a March, 2006 report, the number of children in Gecamines schools has decreased to 45,600 (as of December, 2005). The key factor mitigating further declines has been the interim subsidy that was provided under the PSDC project.

**The Education Sector – Quality of Services**

2.26 Over the years the best trained teachers have left the Gecamines schools and the buildings have fallen in a state of disrepair (Figure 4). As a result, Gecamines’ once elite educational system has seen its economic base disappear and these schools have by now...

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42 Final payments are to be made once justification is received for areas outside Lubumbashi.
43 The greatest share of Gecamines students, close to 80%, are in primary schools. Also, it must be noted that Gecamines schools are distributed in a two-track system, with schools for children of MOE (main d'oeuvre d'exécution, or low level workers), which represent about 80% of enrollment, and schools for children of MOC (main d'oeuvre cadre, or management). MOC schools had a better reputation, and were gearing their students towards higher education paths. However, many observers doubt that the quality of education has remained the same.
44 and a population of about 256,209 school-age children in the mining basin and 934,246 school-age children in the Katanga province.
leveled off in most ways with the rest of the Katanga education system. As of July 2003, Gecamines schools had a formal operating budget of over $5.4 million a year and annual projects for rehabilitating schools and equipment of $2.4 million – but little of this was realized. For the 2003/2004 school year, the budget had dropped to US$1.1 million, of which only 13% was realized (US$150,000). Gecamines owns 908 school buildings and equipment which was valued at $59 million in 2002. Most of the buildings are in need of repairs and in 2006 the value of its educational buildings alone had dropped to US$12.1 million from a prior estimate of US$20.4 million in 2002, reflecting the continued physical deterioration. The most urgent rehabilitation needs for the school year 2005/2006 were estimated to cost US$3 million, with other estimates of the total cost of repairs at about $30 million.

Figure 4: Lubumbashi GCM Primary School Classroom

2.27 Within the categorization of schools in DRCs educational system, Gecamines is grouped with private schools and therefore during the PSIA research its schools were not eligible for some of the existing programs for school rehabilitation, nor for donor or NGO provided programs such as school feeding (see Box in Chapter 3 on some of the actions taken since the initial PSIA analysis). This meant that children in these schools were particularly vulnerable as their parents were not being paid and also had less access to public or donor assistance.

2.28 In 2003, although the formal salary base of Gecamines’ teachers was higher than that for public school teachers they were worse off than these counterparts because they were not actually being paid and the parents of their students also were not being paid. Once the departures program was implemented, this affected the number of teachers (in Likasi for example, 35% of all Gecamines primary school teachers left), and consequently the number of schools and classes and the student-teacher ratio for the worse (see Chapter 3).

2.29 Further, although education used to be free for children of Gecamines employees, this was no longer the case in 2003: Gecamines parents still did not pay the minerval (a form of school tax which parents in other school systems have to pay and which is still born by Gecamines) but they did have to pay a “parents' contribution” that goes towards the

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45 There is little hard evidence on comparative trends between Gecamines and non-Gecamines’ schools, for lack of reliable and comparable data on school performance. See Democratic Republic of Congo, Status Report on Education (Phase 1), February 18, 2004 for a discussion of this issue.
46 The latter budget figures according to the Division Provinciale de l’Éducation Katanga.
47 Gecamines has estimated that its most urgent rehabilitation needs would require US$2.4 million, though this has not been independently assessed.
48 This of course does not apply to the retrenched, who have lost their right to a free education for their children with all their other benefits. This has sometimes created conflicts within the schools between
payment of a “motivation” for teachers. This “motivation” helped to keep some teachers in the classrooms, but also meant that in schools where parents had not received their salaries or did not have alternative activities, teachers were less likely to receive their motivation and more likely to go on strike. Anecdotal accounts noted that children from these schools were more likely to end up in the street as a result, and in cities such as Kolwezi, to enter into artisanal mining activities instead. According to focus groups with miners, teachers, and other Gecamines staff, this dramatically affected the quality of teaching and teacher attendance leading up to the departures program and immediately after. Overall, the effect was expected to be regressive, with lower quality of services among those least able to pay. At the same time, since about half of the workforce left with the departures program, an immediate concern that arose was whether the children of partants would pay the non-Gecamines employee rate for their children to continue in Gecamines’ schools.

2.30 In summary, the changes emerging from Gecamines’ decline were likely to have had the greatest impact in terms of lower quality and decreased enrollment on children in schools with a concentration of blue collar workers (73% of Gecamines students were in this category) for four reasons: (a) as will be shown in chapter 2 their parents, and most likely themselves, are only eating one meal a day (82% to 85%); (b) they were not been able to participate in existing school feeding programs because of their status as part of Gecamines; (c) the high percentage of partants (89%) who were working level staff means that there are more children of partants in these non-cadre schools; and (d) because of non-payment of Gecamines’ workers at that time there was a concentration of vulnerability within such schools as almost all parents work or did work for Gecamines.

“Children write in their notebooks and then erase them again to write the next set of lessons over. They do not have money for notebooks, but this means they have no record of the classes, and it affects the quality of their education” - focus group with GCM teachers in Lubumbashi

2.31 The projected net impact of these various trends would be a more regressive access to education where those who could afford to opted for private, or parochial schools where material conditions were better, and those who could not suffered through the decline in quality or saw their children drop out. Few had turned to state-run schools in part because there are not that many (only 7% of primary schools in the mining basin). In other centers

parents who were still in the employ of Gecamines and the Partants Volontaires, who have been pleading for a two-year grace period.

49 Teachers in Congo public and chartered schools are poorly paid (on the average a little bit less than $10/month, and these are not always paid on time). In compensation teachers generally receive a complement paid by the school and financed through a contribution by the parents (sometime this contribution is in kind, with teachers receiving from parents vegetables, wood, etc.). This “motivation” represents on average at least two-third of teachers income in the public education system. 50 Gecamines schools, like its workforce was divided into a two tier system: certain schools for managers/director, or MOC – about 5,000 primary school students or 17% of those in Gecamines primary schools – and schools for blue collar workers, or MOE – the remainder. On average, schools of the MOC are likely to have higher income parents (even if not paid, research in the mine sector in neighboring Zambia showed that higher level staff are likely to have better education, better access to capital and to opportunities and to fare better after retrenchment than others).
such as Kolwezi and Likasi, the number of alternatives to Gecamines’ schools is substantially reduced compared to Lubumbashi.

2.32 For students with no alternative (either because they are poor or because there are literally no other schools) the impact was projected to be most severe. About 26% of Gecamines students were in schools with no or only one other school within a 15 km radius, or about 12,000 students were at the highest risk from teacher strikes and decline in educational quality. Of these, there is a particular concentration in Kolwezi where 56% of primary school students were in this situation. About 3,600 students were in schools with no other school within a 15 km radius.

Table 6: Percent of Gecamines Students at Highest Risk Because of Lack of Alternatives

<table>
<thead>
<tr>
<th></th>
<th>% of Students with no other or only 1 other school within 15 km radius of current GCM school</th>
<th>Number of Students in these schools (2003/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubumbashi</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Likasi</td>
<td>12%</td>
<td>1409</td>
</tr>
<tr>
<td>Kolwezi</td>
<td>56%</td>
<td>9002</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10,411</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubumbashi</td>
<td>11%</td>
<td>345</td>
</tr>
<tr>
<td>Likasi</td>
<td>21%</td>
<td>735</td>
</tr>
<tr>
<td>Kolwezi</td>
<td>26%</td>
<td>1091</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2171</td>
</tr>
<tr>
<td>Total Primary and Secondary</td>
<td></td>
<td>26%</td>
</tr>
</tbody>
</table>

2.33 In order to address some of these regressive effects that were identified during the PSIA research, an interim support to Gecamines schools was designed to keep teachers in school and keep the children of partants in schools during a two year transition period. For the 2003/2004 school year US$342,338 was paid in such subsidies and in school year 2005/2006 US$349,410 was foreseen, of which US$110,257 had been paid as of March 2006.51

**Water Supply and Electricity**

2.34 Dependence on Gecamines also extends to the consumption and production of key services such as water supply and electricity. Gecamines provides water to the water utility (Regie des Eaux) which then distributes it for sale. Overall, about one half of the utility’s sales within the mining basin come from water purchased from Gecamines. This is the

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51 With the last payment to be made once justification had been received.
situation in Kolwezi, Kambove, Kakanda, Luena and much of Likasi. In one part of Kolwezi, there has been no piped water for 3 years because of a breakdown in the motor pumping water from the Gecamines mine. Lack of payment by Gecamines on behalf of its employees has also affected the ability of the water utility to provide uninterrupted service.

2.35 In mine towns, the mine is often the largest consumer of industrial electricity and thus problems with payment can spill over into the utility as well. In 2004, between 75% and 84% of the electricity utility’s production in the mining basin was consumed by Gecamines (both industrial and residential). Estimates of debt to SNEL were in the order of US$211 million.

Other Services

2.36 Within the old GCM system an agriculture division was established to supply food to employees. Six farms, in Kasonga, Kando, Mangombo, Mulunguishi, Munenga, and Kapumpi, produced vegetables, grain and livestock and employed over 150 persons. The farms were linked to markets in the “cites” or mine townships, which provided wages for GCM spouses and a market for other small farmers. Since the collapse of production GCM farms were barely functional, the result of the inability to finance inputs (seeds and fertilizer), the absence of research and development, obsolete equipment and theft of inputs and equipment. The company did, nonetheless, continue some sporadic distribution of flour into 2003, though at a greatly reduced rate.

2.37 Gecamines also had a center for social and community development which focused on the needs of the vulnerable within the Gecamines’ community such as widows, orphans of Gecamines employees, and the elderly. They had about 140 employees and at the time of the departures program were uncertain of their future.

2.38 Additional social infrastructure included markets in mine townships, recreation centers (44), sports fields (at least 38 different fields), all of which were in a state of neglect at the start of the departure program.

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52 IMC.
3. THE VOLUNTARY DEPARTURE PROGRAM: RISKS AND PROJECTED IMPACTS

Overview

3.1 Faced with a workforce it could no longer pay, in 2003 Gecamines offered its employees with 25 years or more of service a severance package, and the promise of a reinsertion program to help them find an economic activity that would allow them to sustain their families. The operation, which has cost about $43.5 million, was financed partly under the Bank-funded Emergency Recovery Program (for about $25 million) and partly under the Bank-funded Private Sector Development Competitiveness Project. 10,654 employees decided to take advantage of the package, or 99% of those who were eligible, with an average lump sum payment awarded of US$4,022 (or about $2,900 for the 89% of the workers who are blue collar workers and $11,901 for managers and supervisors) paid out between August 2003 and February 2004. This severance package was considered a final lump sum payment. It was not meant to cover the entire balance of back-pay that was owed, though this has continued to be a cause for discontent among former employees.

3.2 Poverty and social impact analysis includes an assessment of the channels through which reforms may have potential impact. The transmission channels for the impacts of reform include employment, prices (production, consumption, wages), access to goods and services, assets, transfers and taxes. At the start of the retrenchment reform, the PSIA team completed a rapid assessment of the most likely short-term impacts, along with suggestions for how to mitigate their impact (see Table 8).

3.3 Analysis of the transmission channels revealed that the far greater constraint to the general welfare of miners stemmed from the impact of an economic transformation of the Katanga province because of the overall decline in Gecamines mining revenues, and the results of its social services being starved of resources (see Table 7).
### Table 7: Transmission Channels and Mine Sector Reforms in DRC: An Assessment of the Situation in 2003/4

<table>
<thead>
<tr>
<th>Policies</th>
<th>Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>Consumption</td>
</tr>
<tr>
<td>Departures Program</td>
<td>Production levels had already fallen, and this was unlikely to be further affected. If downsizing allowed reform to occur, production would be expected to increase but this would require a transparent institutional framework and political stability to attract investors.</td>
</tr>
<tr>
<td>Policies</td>
<td>Prices</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Production</td>
<td>Consumption</td>
</tr>
<tr>
<td><strong>Failure of Gecamines</strong></td>
<td>Production levels dropped from 465,000 Tons in 1990 to 9,105 Tons in 2003. External revenues generated prior to decline estimated about US$1 billion per year.</td>
</tr>
<tr>
<td>Macro</td>
<td>Health</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>There were concerns initially that the exchange rate to the US$ and inflation would be affected by the influx of $43 Million into the province. In the end, these have been relatively stable, with little difference between the official and black market exchange rate</td>
<td>Gecamines runs 1 national hospital (Sendwe, 1000 beds in 2002), 7 local hospitals (1780 beds), 3 clinics, 14 health centers, and 18 factory health centers with 77 doctors, 3 dentists, 3 pharmacists, and 1647 medical support staff. At the start of the program miners did not pay consultation, laboratory or hospitalization fees* but would need to start paying these. <strong>More non-miners use Gecamines services than miners (1 million+ persons) and Gecamines filled role of secondary medicine in region.</strong> Because of no financial support by Gecamines (0 investment budget 2002, 0 budget for medicines), health care personnel moonlight in private clinics and miners have to pay for all materials and medicines.</td>
</tr>
</tbody>
</table>
Potential Changes

**Macro**
Influx of large amounts of $US can influence exchange rates. In initial days of payment, many miners changed US$ into FC; temporary affect on exchange rate. Lack of liquidity in banking system halted some of this as Banks ran out of francs. In more mine-dependent towns (Likasi, Kolwezi) risk of inflation within next several months after package was paid, affecting overall population.

**Health**
Miners would need to pay for consultation fee, laboratory fee and hospitalization fee as GCM is no longer funding. May not be as significant a cost, though frequency of the cost needs to be calculated and compared to competitors. Problem with morale of those staff who stay if they do not receive salaries (14,000 staff applied while far fewer met the criteria) may further degrade service quality. Although one-third of medical staff will be retrenched, these will primarily be cleaners, guards, medical assistants.

**Education**
School wants to introduce token payment ranging from $1 to $4 per month per pupil. Rough estimates show that this would cover roughly no more than 10% of the stated costs of running the system. Urgent need to clarify whether Gecamines will pay teachers’ salaries in 2003/2004 in order to phase in a process as students return to schools with no teacher in a few weeks. Also, urgent need to empower local Gecamines employees to relocate teachers so that schools are not unexpectedly closed and students shut out of system without adequate time to find placement elsewhere.

**Electricity**
Miners will start to pay their own bills and may need time to adjust consumption. Also Snel wants to install Individual meters in Gecamines' cités, but is not expected to be able to do so before 3 years.

**Social Services**
One third of the employees will be retrenched. Since last update, this unit has been closed and installations being sold. Staff represent valuable link to miners, have worked with the mine community on issues of vulnerability for many years.

**Agriculture**
Increased demand for expertise in intensive agriculture for profit, business planning to expand agricultural marketing and production. Level of expertise local NGOs, agents not yet assessed.

**Water**
Those with connections (60%) may see increases in their utility bills. One year has apparently been granted as an interim period before standposts are privatized.
<table>
<thead>
<tr>
<th>Macro</th>
<th>Health</th>
<th>Education</th>
<th>Electricity</th>
<th>Social Services</th>
<th>Agriculture</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA: Following initial discussion, central bank represented on Comité Consultatif and better planning helped to assure liquidity. University monitored inflation. Governor discouraged predatory pricing.</td>
<td>Financial analysis, administrative analysis and stakeholder consultation on potential options for future ownership and management of health services is needed. Start with cost recovery progressively rather than abruptly. Consider allowing pre-payment for certain fees, or potentially explore insurance schemes in the short-term, while retrenches still have resources. Attention on investment in the hospital and clinic system. Explore interim subsidy during transitional period.</td>
<td>Need financial analysis of sector, ability and willingness to pay, alternative public schools, appropriate and sustainable fee levels. School directors should encourage parent-teachers associations be consulted in this process. Include questions on retrenchee survey of number of children in mine schools.</td>
<td>Consumer education, assess ability to pay, promote energy saving devices to keep affordable</td>
<td>One issue to be resolved is the ownership of these installations; the most important issue is to identify organizations that could properly manage them.</td>
<td>Assess level of technical expertise among those organizations offering advice to retrenches. Assess viability of fee-for-service. Analyze results of surveys of retrenches. Provide support through URK/COPIREP project to NGOs and cooperatives, including advice and capacity building.</td>
<td>Confirm agreement on interim period. Assess willingness and ability to pay economic rates. Utility should increase consumer education on water conservation.</td>
</tr>
</tbody>
</table>
**Situation at Start of Voluntary Departure Program (late 2003)**

<table>
<thead>
<tr>
<th>Poverty/ Degree of Vulnerability</th>
<th>Housing</th>
<th>Other Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining Gecamines workers were, by and large, not being paid. Preliminary figures showed that 86% of Gecamines workers only ate one meal a day. Thus, particularly for the lower level workers, the impact of non-payment has been significant. This compares to only 14% for a control group of non-Gecamines workers. Also, many of the departees are older, with a sample showing 42% of them aged 50 to 64. Gecamines workers supported 7.4 dependents compared to 5.8 of non-Gecamines workers. <strong>This means roughly 80,000 persons are directly affected by those leaving Gecamines.</strong> There are some claims that some widows have not received their “compte finale” but no evidence is available on this.</td>
<td>Some Gecamines employees and some <em>partants volontaires</em> were living in houses or apartments that are still owned by Gecamines (about 6,000 units). The situation varies greatly in the three different groups (west, center and south). People living in them were not paying rent (in part because Gecamines was not paying them salaries anyway). A few hundred units were being occupied by military personnel.</td>
<td>Gecamines had built markets in the <em>cités</em>, recreation centers (12 for MOC, 32 for MOE, 17 for students), sport infrastructures (22 soccer fields, 16 volley ball courts, etc.) but has been unable to maintain them in the last ten years; they are all in a state of disrepair.</td>
</tr>
</tbody>
</table>

| Potential Changes | Over short-term dependents will benefit. Over the long-term the number of dependents will likely diminish if this is similar to the Zambian experience. | People living in Gecamines-owned houses will have to either pay rent or leave. | These are likely to be a low priority within Gecamines. |

| Steps Taken/ Steps Recommended | Confirm that the compte finale has been paid for widows and orphans. | A policy will have to be defined for dealing with Gecamines’s housing portfolio | Consult civic organizations, NGOs about interest in taking over these assets. |
3.4 As the table on transmission channels illustrates, the most important impacts that were anticipated at the start of the voluntary departures program included a decline in formal employment, a decrease in the quality and quantity of social services (health and education primarily) available to former miners, and in increase in the cost of electricity, water, health and education services for most. The PSIA found that the situation of the miners had deteriorated so substantially during the decline of Gecamines, that the direct impact on wages and employment would be far less significant than in traditional downsizing programs, though this does not mean that miners’ income would not drop and ultimately this can only be assessed through a follow-up to the baseline survey. Other short-term impacts identified at the outset included the risk of inflation and exchange rate fluctuations, and the risk of increased theft because miners had no place to safeguard their packages. Another identified risk involved the rapid dispersion of miners’ packages because of family pressures, and paying back debts accumulated over almost 30 months (miners did pay back debts to water companies immediately following packages being paid). Indirect impacts included the effects on the quality of education as schools closed and classrooms combined because one third of all teachers had participated in the voluntary departure program (see section on ancillary social services below) and a decline in health care quality because of the departure of medical and nursing staff and because of dramatic declines in Gecamines’ funding for these services.

3.5 Based on the information in the rapid assessment at the outset of the PSIA, several actions were fed directly into the program run by COIREP/URK office – see Box below. A key issue which emerged from this assessment was the potential descolarization of thousands of children of partants who no longer qualified for free Gecamines schooling. This was addressed through the design of a program to provide interim subsidies to teachers in these schools (see box).
Box 2: Feeding Poverty Analysis into Program Design

The rapid implementation of the departures program was prompted by the pressure to provide relief to Gecamines employees who had not been paid because of Gecamines’ state of financial insolvency. This meant that the PSIA needed to be designed to feed information into a rapidly evolving set of programs and policies. Based on the identification of short-term impact (see Table 8), numerous recommendations were made. Among these, the following actions were undertaken, in some cases mitigating negative impacts:

① Information centers were created for former employees, based on lessons learned during a similar retrenchment operation in the neighboring Zambian copper mines. These provided a way of monitoring those who had left, and of providing information on programs, training opportunities, jobs and information on benefits.

② The creation of a multi-stakeholder consultative committee (comité consultatif) which was to monitor areas of reform that had been identified as holding risk in the short-term. This included, among others, the Governor’s office, the police, and representatives of the Central Bank.

③ The local consultative committee facilitated the identification and mitigation of the risks of inflation as the Governor intervened in public communications to discourage predatory pricing practices and to ensure that there were increased police patrols to protect partants during payment periods. In addition, the local project office (URK/COPIREP) ensured that the Central Bank was aware of the likely demands on local currency, and responded accordingly.

④ Negotiations with banks by the URK/COPIREP project team to secure deposit facilities for partants (though this remained a challenge in Likasi)

⑤ The design of an innovative program to provide interim subsidies directly to teachers monitored by parents associations. The objective was to keep the children of partants in school for school year 2003/2004 and 2004/2005 and to ensure that the 41,000 to 50,000 students in Gecamines schools were able to continue their education (because teachers would not go on strike as they had not been paid). Among these, were approximately 14,000 children of partants (though the initial estimate was 23,000 and it is not clear whether they dropped out) for whom a subsidy was provided to ensure that they were allowed to remain in Gecamines schools during this transitional period of two school years.

⑥ The provision of interim support to Gecamines health care for two years

⑦ Monitoring of cooperatives and intervention with capacity building when partants investments were at risk in Likasi because of a poorly conceived investment scheme at the Kambove cooperative.

⑧ Organization of meetings with partners (UNICEF and public health and education authorities) to explore how Gecamines schools could participate in school feeding and other programs prior to formal decisions on their future status.

⑨ Broader stakeholder consultations on the options for the future of Gecamines social services with the involvement of those directly affected; this was initiated through the formation of sectoral working groups both in Katanga and in Kinshasa and with a workshop in June 2005 to discuss the implications of UNILU’s PSIA studies. The consultation included representatives from unions, parent-teacher committees, partants, sectoral ministries and many others (see Annex 4). This may have contributed, in part, to a broad consensus on the need to move forward on the IMC recommendations and subsequently the long-stalled initiative to bring in a management team proceeded.
Approach

3.6 Ex ante poverty and Social Impact Analysis requires that one consider the alternatives to reform, including the option of not undertaking the reform but leaving the situation as it is.53 The voluntary departures program was but one element of a proposed restructuring policy for Gecamines and for the mine sector, that would in theory provide benefits through eventual resumption in mine sector production, and generation of income both to the region and to the national government (and therefore if the government were efficient in service delivery to others through improved public services in DRC as well). However, the number of necessary accompanying factors required to realize these benefits are significant – namely political stability, improved governance and rule of stable law in the mine sector, and continued improvements in the macroeconomic sector. With the level of debt that Gecamines had accumulated and its inability to pay its staff, there were few if any alternatives to downsizing as one can assume that the trends outlined in the previous section, would have continued.

3.7 In fact, the situation of Gecamines employees prior to the departures program had deteriorated to a sufficient level, that they had become worse off in several – though not all - respects than the general population in Katanga province in terms of a number of indicators (current consumption, asset base, social capital, skills, age) as well as understanding the types of opportunities and economy they would face once they had left Gecamines.

Table 9: Geographic Distribution of Partants

<table>
<thead>
<tr>
<th>Gecamines'Grouping</th>
<th>Cities</th>
<th>Partants</th>
<th>% of Total Partants</th>
<th>% of GCM Mining Workforce in Locale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum Western Group</td>
<td></td>
<td>3319</td>
<td>32%</td>
<td>38%</td>
</tr>
<tr>
<td>Kolwezi</td>
<td>3169</td>
<td></td>
<td>30.6%</td>
<td></td>
</tr>
<tr>
<td>Luena</td>
<td>150</td>
<td></td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>Kasonga</td>
<td>0</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Sum Central Group</td>
<td></td>
<td>3390</td>
<td>32.6%</td>
<td>47%</td>
</tr>
<tr>
<td>Likasi</td>
<td>2408</td>
<td></td>
<td>23.2%</td>
<td></td>
</tr>
<tr>
<td>Kambove</td>
<td>730</td>
<td></td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Kakontwe</td>
<td>205</td>
<td></td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Mangombo</td>
<td>42</td>
<td></td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>Mulungwish</td>
<td>2</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kando</td>
<td>3</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Sum Southern Group</td>
<td></td>
<td>3655</td>
<td>35.2%</td>
<td>53%</td>
</tr>
<tr>
<td>Lubumbashi</td>
<td>1859</td>
<td></td>
<td>17.9%</td>
<td></td>
</tr>
<tr>
<td>Kipushi</td>
<td>1791</td>
<td></td>
<td>17.3%</td>
<td></td>
</tr>
<tr>
<td>Ilebo</td>
<td>5</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10364</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Partants as a Percentage of Population, Remaining GCM Employees and Estimated Number of Artisinal Miners

<table>
<thead>
<tr>
<th></th>
<th>Kolwezi</th>
<th>Likasi</th>
<th>Lubumbashi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Population</td>
<td>± 400,000</td>
<td>± 280,000</td>
<td>± 1,500,000</td>
<td></td>
</tr>
<tr>
<td>Number of Partants</td>
<td>3,319</td>
<td>3,390</td>
<td>3,655</td>
<td>10,364</td>
</tr>
<tr>
<td>Percent of Population (partants/population)</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Percent of Population (Including dependents - avg. 8 dependents)</td>
<td>7%</td>
<td>10%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Number of GCM Employees Staying</td>
<td>5,346</td>
<td>3,879</td>
<td>3,284</td>
<td>12,509</td>
</tr>
<tr>
<td>Number of retired, widows, orphans</td>
<td>2,344</td>
<td>1,922</td>
<td>3,419</td>
<td>7,685</td>
</tr>
<tr>
<td>Who have said they have not received their final payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Artisinal Miners &quot;creuseurs&quot; from number of licenses sold by EMAK (2001, 2003)</td>
<td>20,000 in 2001</td>
<td>12,000 in 2001</td>
<td>8,000 in 2001</td>
<td>38,000 in 2001</td>
</tr>
<tr>
<td></td>
<td>6,826 in 2003</td>
<td>11,442 in 2003</td>
<td>1,690 in 2003</td>
<td></td>
</tr>
<tr>
<td>Number of Mines Exploited by EMAK</td>
<td>± 10 mines</td>
<td>± 40 mines</td>
<td>± 12 mines</td>
<td>± 62 mines</td>
</tr>
</tbody>
</table>

Profile of the Partants

3.8 The University of Lubumbashi’s baseline survey of Gecamines’ employees (both partants and those remaining), of a “control group” of non-Gecamines residents living in contiguous areas together with exit interviews for partants provided indicators of whether miners were better or worse off than the general population at the outset, and therefore the degree to which the departures program would trigger a substantial decline in living conditions or not.54 The common wisdom had been that Katanga was one of the richest provinces, and that miners were among the best paid workers in the country. However, while this was the case in the past, the situation has changed substantially as of 2003 as miners sold off assets, and started to exhaust their social network. By the time the departures program started, there were few alternatives for miners who had exhausted both their cash as well as their social capital.

54 The Gecamines' employees were selected at random from a Gecamines’ list of employees within the following stratified categories: geographic location with selection from each of the three major mining cities (Lubumbashi, Likasi, Kolwezi), whether they were higher level staff or workers, and whether they were slated for departure or to stay in Gecamines. The sampling selection for the non-Gecamines interviewees was the 5th house from one of the randomly selected Gecamines' houses. However, because of the lack of any sample frame outside of Gecamines’ employees, or census, this had no sample frame to reference. The sample included 482 Gecamines employees (current and those slated to leave) plus 118 non-Gecamines residents. Exit interviews were administered to all those leaving, though certain time consuming questions were administered only to a sub-sample.


**Consumption Levels Prior to Departure**

3.9 Starting in 1993, Gecamines experienced more and more difficulties meeting its payroll; with time arrears started to accumulate, particularly after 1997 and as noted previously, in the Fall of 2003 Gecamines employees had accumulated 30 months of arrears (except, sporadically, some highly selected groups which were deemed necessary to keep running a few bare bones operations)\(^{55}\). In addition, salaries of Gecamines employees were progressively reduced down to \(\frac{1}{2}\) of original levels through an accounting artifice (all salaries were re-defined in dollar terms and a below-the-market exchange rate was progressively applied). To survive families did a little bit of subsistence farming, sold off their possessions (refrigerators, tables, beds, etc.), women took up small scale activities, and many started to skip meals (sometimes eating only once every other day, or even less – see below). Many miners spoke of increased divorce and family tension as the long period of decline had frayed once strong family support networks.

3.10 Analysis of consumption revealed that at the start of the voluntary departures operation Gecamines’ employees were worse off than the general population in Katanga, and substantially worse off than the average Congolese; 85% of those slated to leave Gecamines and 82% of those who planned to stay in Gecamines ate only one meal a day (see Figure 5). This compares with 55% for non-salaried individuals and 45% of salaried individuals in the non-Gecamines control group. What was surprising was that Gecamines employees also ranked well below the national average of 27% of households eating only one meal a day.\(^{56}\) The suppression of Gecamines food distribution, as well as the non-payment of salaries of most Gecamines’ employees for about 30 months as of August 2003 contributed to this dramatic decline in consumption. Consumption of meat also followed the same trend only 7% of Gecamines employees surveyed said they regularly ate meat compared to 25% of non-Gecamines employees.

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\(^{55}\) However, Gecamines continued distributing bags of flour to some, but very irregularly. Employees receive a 45kg bag of flour every 45 days or every two months. For an average size family it represents about two weeks of supply.

\(^{56}\) Since the sample of non-Gecamines’ workers is quite small, the PSIA team compared this to other more representative statistics for the region and nationally which confirmed that Gecamines workers at the start of the departures program were in worse condition than those of the general population of Katanga. According to the UNICEF survey, in the Katanga 29% of households have only one meal a day, and 61% two meals a day (it must be remembered that the Gecamines mining region represents only a small section of the Katanga, and about \(\frac{1}{3}\) of its population). UNICEF, op. cited, Kinshasa, 2002, p. 39.
Although many Gecamines employees had sold assets, their asset base was not systematically lower than that of neighboring groups and in terms of key assets such as home ownership, they were at an advantage. 74% of partants owned a house at the beginning of the program as compared to 49% of those staying at Gecamines, 31.5% of non-GCM, non-salaried and 26% of non-GCM, salaried surveyed households; that difference can be explained by the fact that the partants represent an older generation, which was given the opportunity to purchase their house from Gecamines with preferential loans. On other durable consumer goods the partants seem to be slightly worse off than those remaining at GCM or the non-GCM salaried group, and somewhat still better off than the non-GCM, non-salaried group, a fact which seems to give partial credence to the widely circulated stories of Gecamines families selling off their assets (and buying them back after receiving the severance package). There is a marked difference within the group of Gecamines employees between partants and those staying, those staying being generally better off (except for home ownership).

This figure is according to the URK database which was administered to all departees; the UNILU sample survey of 480 Gecamines employees presents an ownership percentage of 63%.
Table 11: Asset ownership Gecamines Partants, Remaining Employees, Control Groups

<table>
<thead>
<tr>
<th>% ownership</th>
<th>Radio</th>
<th>B.W. TV</th>
<th>Color TV</th>
<th>Phone</th>
<th>Fridge or freezer</th>
<th>Chairs</th>
<th>House</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partants</td>
<td>62.9</td>
<td>57.1</td>
<td>12.2</td>
<td>12.8</td>
<td>28</td>
<td>87.9</td>
<td>63 (74)</td>
</tr>
<tr>
<td>Remaining GCM Employees</td>
<td>73.6</td>
<td>54.3</td>
<td>21.8</td>
<td>13.3</td>
<td>34.1</td>
<td>96.1</td>
<td>49.1</td>
</tr>
<tr>
<td>Non-GCM, Non-salaried</td>
<td>56.4</td>
<td>28.3</td>
<td>24.1</td>
<td>20.8</td>
<td>25.9</td>
<td>84.9</td>
<td>31.5</td>
</tr>
<tr>
<td>Non-GCM, Salaried</td>
<td>88.9</td>
<td>52.8</td>
<td>25.7</td>
<td>33.3</td>
<td>38.9</td>
<td>97.3</td>
<td>25.7</td>
</tr>
</tbody>
</table>


3.12 It was anticipated that the impact of leaving Gecamines would be more severe for the 36% of partants who did not own their own house. There is some variation in terms of home ownership among partants across cities: In Kolwezi homeownership was only 66%, whereas it reached 78% in Likasi, 79% in Lubumbashi and 88% in Kambove. 12% of partants overall were renting, and 12% were in a precarious situation, most often living in a house owned by Gecamines but for which they did not pay rent (since they were not being paid). The latter situation was most frequent in Kolwezi and Kipushi (19% and 20% respectively), whereas in Likasi and Lubumbashi it represented a minority of cases (5%).

59 Gecamines had asked the partants living in a Gecamines house to leave the houses by May 2004.

3.13 At the time of departure in 2003 68% of partants lived in a Gecamines camp (cité), which at the time still afforded them free water and free electricity, as there were no individual meters installed nor any lump sum payment system. Unskilled workers were more likely to live in a cité (73%) than skilled workers (68%), supervisors (45%) and managers (28%). In Lubumbashi only 45% of partants lived in a cité, as compared to 93% in Kambove, 91% in Kipushi, 69% in Kolwezi and 63% in Likasi. This system, which also benefits those remaining at Gecamines, is scheduled to have come to an end in January 2005, at which point it was planned to be the water utility (Régideso) and the electricity utility’s (Snel's) responsibility to collect payments. Partants living outside of the cités have been paying for their water and electricity already for a few years - in principle at least, since bill collection by Regideso and Snel appears to be fairly lax.

Social Capital and Psychological Perspective

3.14 In addition to monetary assets, one key factor that emerged from numerous interviews and discussion groups was the psychological perspective of the partants which would affect their ability to cope with their changed status. Most of the workers in the Gecamines (or leaving it in the context of the departures program) started their career three decades ago or more with very

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A special mention may be made of Mangombo, where out of 42 partants in total, 37 are in a precarious tenure.

59 A special mention may be made of Mangombo, where out of 42 partants in total, 37 are in a precarious tenure.

60 Socio-professional class has a diverse impact on home ownership: the percentage of homeownership rises through the classes of unskilled workers (from 70% in class 8 -the lowest class, to 79% in class 5), but then drops among skilled workers (class 4, 73%) and supervisors (66%); however, 80% of managers are homeowners. A similar phenomenon is observed as regards precarious tenure: 19% of Class 8 partants live in a house without paying rent, but only 9% of Class 5.
high expectations (average length of employment of the partants is 33 years): That they would be taken care of from cradle to retirement, as their parents were; that there would be free schools for their children, free health care for their sick, food distribution for all, free recreational infrastructures, housing, free water and electricity, and security of employment for their whole life, not to mention -for the more fortunate- perks such as trips abroad or preferential loans for cars or houses, secluded clinics and special schools for their children. Gecamines workers expected, like everyone else, that the extremely rich copper deposits of the Katanga would always provide for them and their children. Both their social and work life revolved around the paternalistic company, and its collapse has left a majority of older workers (on average 56 years old with one quarter over 60 and one tenth over 65) with skills in working within a formal hierarchical environment, but without the entrepreneurial, budgeting, or networking skills required in other sectors.

3.15 Gecamines’ paternalistic model had, according to many social observers in the Katanga Province, a weakening influence on the social fabric. It is, however, very difficult to assess the true impact of the last 80 years of paternalism, except through a few qualitative indicators: According to local observers there are fewer associations and NGOs in the Katanga than in other provinces of the DRC; based on exit interviews, less than 4% of all partants belonged to any form of association or organization (Table 12 below). About 19% of partants belonged to cooperatives, but the majority of these are agricultural cooperatives, with the bulk joining one scheme alone in the Likasi area (Kambove) run by a Catholic Priest that offered a set return for deposits (see Table 13 below). For many miners this did not represent a cooperative in which they would work collectively, but a perceived safe haven for funds that many family members and debtors were eager to get. In Likasi, the lack of trust in the banking system and high fees, meant that miners had few other options in terms of where to safeguard their packages. If one excludes the scheme in Likasi (Kambove), then only 3% of partants belonged to a cooperative at the time of leaving Gecamines.

3.16 This culture also left deep suspicion among partants from working in collective groups. After the initial PSIA assessment, the URK project office began to emphasize in its communication plan the importance of partants working together, but this was a significant leap for workers used to responding to a vertically oriented structure. This would severely hamper the partants possibilities as packages could be leveraged – for example in agricultural activities – if capital goods such as tractors or transport or equipment could be shared. However, it should be noted that during a follow-up visit to Kolwezi in 2004, the number of partants who belonged to some form of association or organization (largely agricultural cooperatives) had increased from the baseline of only 7% stated in exit interviews to 15%. By 2005, the number of partants who belonged to some form of association had increased to 5,416, or about half, up from 22% when they left Gecamines, though about a third of these belonged to one large scheme in Likasi noted above. A most recent study noted that the revenues from collective projects were far below

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61 There is little variation between professional categories (we are referring here to Gecamines classification), except that people in the two lower categories are on average older: partants in class 8, the lowest, are on average 59 ½ years old, and partants in class 7 are 57.

62 There is little variation between professional categories (we are referring here to Gecamines classification), except that people in the two lower categories are on average older: partants in class 8, the lowest, are on average 59 ½ years old, and partants in class 7 are 57.

63 Source: URK/COPIREP
those for individual projects, though the causal links are not clear (whether those with less skills and less capital tended to join the collective projects more than individual projects).64

**Box 3: Feedback from Women Partants and the Wives of Partants in Kolwezi and Lubumbashi: Low Social Capital**

In a focus group discussion with the wives of partants in 2004, less than one year after the departures program, the lack of social capital and level of trust was evident:

“We do not want to, in any case, associate ourselves with others because we are afraid that others will steal our money…we also do not have confidence in international organizations such as NGOs or cooperatives.”

All of the women had individual projects, but were not able to realize them because they did not have sufficient capital. About one third of their packages went to pay debts that they had accumulated. Women in another focus group noted that they had large families because Gecamines had previously guaranteed all of their needs and thus did not hesitate to remark:

“Gecamines is my father, Gecamines is my mother” or “Gécamines djo baba djo mama”

**Table 12: Indicators of Social Capital at Time of Departure from Gecamines**
– Membership in any form of association among voluntary departees

<table>
<thead>
<tr>
<th>Association</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>8,056</td>
<td>78%</td>
</tr>
<tr>
<td>Association</td>
<td>265</td>
<td>3%</td>
</tr>
<tr>
<td>*Cooperative</td>
<td>1,981</td>
<td>19%</td>
</tr>
<tr>
<td>Church</td>
<td>13</td>
<td>0.1%</td>
</tr>
<tr>
<td>NGO</td>
<td>49</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total</td>
<td>10,364</td>
<td></td>
</tr>
</tbody>
</table>

* A significant proportion of these joined one single cooperative started by a Catholic Priest in Likasi which later experienced problems in implementation.

**Table 13: Indicators of Social Capital – Membership in any form of association among voluntary departees by location**

<table>
<thead>
<tr>
<th>Geographic Location</th>
<th>% Partants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center: Likasi</td>
<td>54%</td>
</tr>
<tr>
<td>West: Kolwezi</td>
<td>7%</td>
</tr>
<tr>
<td>South: Lubumbashi</td>
<td>8%</td>
</tr>
</tbody>
</table>

3.17 However, a majority of partants did not seem to express the attitude during their exit interview that they had been left aimless and lost by decades of paternalism (64% stated they knew what they wanted to do). As in similar mine reforms in the neighboring Copperbelt in Zambia, higher level staff are better equipped than lower level staff to deal with life after Gecamines. The majority of managers and directors had a precise idea of how they would reinsert themselves. Age plays a factor, and the younger the worker, the more likely he is to know exactly what he wants to do (69% of employees less than 50, compared to 55% of people over 65).

Table 14: Partants’ attitude towards reinsertion by socio-professional category

<table>
<thead>
<tr>
<th></th>
<th>Directors</th>
<th>Managers/supervisors</th>
<th>Workers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows exactly what he wants to do</td>
<td>95%</td>
<td>80%</td>
<td>62%</td>
<td>64%</td>
</tr>
<tr>
<td>Has some idea of what he wants to do</td>
<td>3%</td>
<td>17%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>Unsure and waits for advice</td>
<td>1%</td>
<td>3%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Feels lost and waits for direction</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: URK database, 2004

3.18 In principle, the majority of Partants should have started their reinsertion into regular economic activity with the monetary package that they received. However, in discussion groups there was mention of debts – some formal such as towards others or utilities and some towards family members who had long been supporting the partant. Limited data from exit interviews suggested that among those who had and were willing to report formal debts, the debts represented about 9% of the monetary package received (an average of US$299 per person for those reporting debt).65 However, within focus group discussion much higher rates of debt were reported, and employees may have been hesitant to admit the level of their debt to their employers. There are some reports that debts increased once rumors of the departures package spread and the time that payments were made. One obstacle that partants would encounter would be their lack of trust of the formal banking system, in part because of a bank failure several years back in which many people lost their deposits, and, as in the case of Likasi, the exorbitant fees banks would charge to hold deposits. Unlike some other parts of Africa or even of DRC, there are almost no informal banking or savings systems among partants. Some partants, lacking skills in money management and under tremendous familial pressure, and without a bank or safe haven, spent their packages; many had such deeply ingrained dependence on Gecamines that they assumed, in spite of information campaigns to the contrary by URK/COPIREP, that Gecamines would eventually step in and give them further assistance with reinsertion activities, and if not Gecamines, then URK/COPIREP; many considered the package simply as a discounted back pay.

65 It is not clear that the question was administered to all partants during exit interviews and reported debt would not necessarily have included back payments to utilities.
**Human Capital - Skill levels**

3.19 Most of the partants were categorized as unskilled workers – over 82% of those who left. Yet, during exit interviews a majority of workers stated that they had some experience in the economic areas/activities they planned to pursue after leaving Gecamines. This is primarily because many partants had already started to engage in subsistence agriculture, and this was the field that the majority of partants chose because they were familiar with it.

**Table 15: Attitude Towards Reinsertion and Experience of Partants in Domain of Reinsertion**

<table>
<thead>
<tr>
<th>Attitude towards reinsertion</th>
<th>Has experience</th>
<th>Has no experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows exactly what he wants to do</td>
<td>78%</td>
<td>22%</td>
</tr>
<tr>
<td>Has some idea of what he wants to do</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Unsure and waits for advice</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Feels lost and waits for direction</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>Overall Experience</td>
<td>65%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: URK database, 2004

3.20 It must be noted that partants rated their own experience and as such this data provides only a subjective assessment; it might well be that this level of experience will prove insufficient to carry them into a successful reinsertion. If one compares the degree to which partants had formulated their plans for what they would do after leaving Gecamines, it is notable that of the 34% that stated they had no experience, 79% of these had either already defined, were either launching or in the phase of structuring projects they would undertake. There were close to 3,000 workers in this situation (no experience but launching projects), which suggests that without further interventions the rate of project failure might be at risk among this group.

**The reinsertion options of Partants Volontaires**

3.21 As noted above, to survive so many years without a regular salary, Gecamines employees and the members of their family took up various activities on the side: car repair, knitting, teaching, menial work, construction, etc. However, because it offered the best opportunities for basic survival, they overwhelmingly engaged in subsistence agriculture; about one-third (or over half of all partants answering that they had an extra economic activity) listed agriculture as the household's first economic activity outside of their official employment by Gecamines (and among those who listed a second activity, 49% also listed agriculture). Small trade attracted 21% of households, skilled technical work (welding, mechanics, electricity, etc.) provided a recourse for 6% of households, and small scale mining was practiced by only 3%. There was little difference between socio-economic groups, and if managers had more diversified activities (getting involved in the more capital intensive transport activity) they overall followed the same strategy as workers. The level of technical knowledge did not seem to alter this pattern, and 45% of skilled worker households (Classe 4) had agriculture as a first survival activity, while 30% got involved in small trade, and only 6% engaged in skilled technical work thus reinforcing the assessment that there are limited alternatives to mining.
Figure 6: Coping Mechanisms and Income Diversity: Percent Partants with Additional Economic Activities at Moment of Leaving GCM

Figure 7: First Survival Activity of Partant Household

Source: URK database, 2004

Reinsertion in agriculture.

3.22 Not surprisingly, the overwhelming majority of partants stated that they would continue in the only alternative activity that they knew, agriculture (74% of which 54% is subsistence). Those with better skills, better education and more capital planned to turn also towards other activities such as transport (14% of managers/supervisors, as compared to 4.4% of workers), and small trade (12% of managers/supervisors, as compared to 6% of workers). Higher level staff remain predominantly oriented towards agriculture, but are then somewhat more inclined to get
into commercial agriculture rather than in simple subsistence agriculture. Even 23% of the directors were also planning to get involved in subsistence agriculture.

Figure 8: Planned Reinsertion Activity of Partants by Level of Worker

Table 16: Planned Reinsertion Activities by Locale (Percent of Partants)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Likasi</th>
<th>Kolwezi</th>
<th>Lubumbashi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsistence agriculture</td>
<td>15%</td>
<td>79%</td>
<td>72%</td>
<td>55%</td>
</tr>
<tr>
<td>Commercial agriculture</td>
<td>51%</td>
<td>5%</td>
<td>3%</td>
<td>19%</td>
</tr>
<tr>
<td>Small trade</td>
<td>8%</td>
<td>6%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Transport</td>
<td>12%</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Skilled technical work</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Food processing/selling</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Health services</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Small scale mining</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>2%</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>

3.23 Even though agriculture was the primary choice partants expressed interest in for reinsertion activity, there are multiple constraints on that type of activity, from the partants' lack of capital to the lack of good roads and the high cost of inputs. It is notable that in 2001, the Katanga province ranked among the lowest in terms of agricultural extension, or any other type of development support: 2.2% of households benefited from agricultural extension services, as compared with 9.3% on national average (14.6% in western Kasai, and 31.1% in the Bandundu).

66 Among workers, 27% of those planning to go into agriculture are choosing commercial agriculture, whereas among managers/supervisors the ratio is 38%.
This stems, again, from the historical perception that Katanga was a rich province and needed less outside help, particularly in areas outside of mining.

3.24 Although many partants had experience in agriculture, interviews often provided the impression that for most, the level of experience is sufficient only for the generation of a subsistence level of production. The URK/COPIREP reinsertion program included two agronomists, and an NGO (PACT) supported agronomist to help partants in developing agricultural enterprises, but this could not substitute for the lack of public or private services in this area given the large number of partants. Rough estimates of the number of people who could potentially be reached by the NGO-supported program, by an FAO supported program and by the project agronomists do not count much more than one quarter of the partants. Some of the project assistance has focused on support for commercial or non-subsistence agriculture through NGOs in order to maximize both employment and income; assistance has been targeted at the most likely candidates to succeed, which, by definition, does not include those who may have a harder time adjusting or who had less prior experience. The advanced age of most partants also mean that they may not be able to easily acquire new skills in entrepreneurship, budgeting and skills required for non-subsistence agriculture.

3.25 Another reinsertion risk identified by the monitoring team stemmed from the low level of NGOs and cooperatives, which meant that some of the new ventures that partants were involved in were with organizations or cooperatives that did not have the requisite experience in marketing, business planning, and financial management.

3.26 Lack of capital was expected to be a major impediment to reinsertion: 94% of managers and workers planning a reinsertion in commercial agriculture explained, at the time of their exit interview, that they had no capital (and respectively 92% and 88% in subsistence agriculture). That problem may have been solved at least partially by the payment of the package though without adequate banking facilities, and intense family pressure for the use of these funds, this may have continued to pose problems.

3.27 Access to land was not identified as presenting a major constraint, as it is still easy to secure access to a field by making a small payment to a traditional chief (about $10 per ha in the Lubumbashi region, plus a small share of the annual production) or by going through an official process with the province, though few do this. When asked whether they wanted additional land, less than 3% of partants leaving Gecamines said yes (the highest was in Likasi, about 7%, and the lowest in areas with other activities such as Kolwezi and Lubumbashi). According to the exit survey, Gecamines households had plots of 2.5 hectares, with a median of 2 hectares (the UNILU sample survey had somewhat lower sizes of 1.3 ha on average and a median of 1 ha). Agronomists usually estimate that 3 ha are necessary to feed a family. Only about 5% of the partants had 10 ha or more, and these were more likely to be at the manager/director level.

---

68 5% trimmed mean, to eliminate the impact of a few outliers (e.g. 112 ha for one individual).
3.28 In discussion groups, partants noted constraints on access to inputs (seeds, fertilizer) and transport time to fields as primary constraints to increasing production. The difficulty of accessing inputs such as fertilizer stem from poor roads (particularly for the road between Kolwezi and Lubumbashi) and because of institutional distortions in input markets; for example, the Governor's office controlled the sale and distribution of subsidized imported fertilizer – which can sell for as little as half as much as that sold on the open market - those with the best contacts could gain access at lower prices and others must purchase higher priced fertilizer on the open market. High transport costs also increase prices of inputs such as fertilizers, to a point that it is sometimes cheaper -as in Kolwezi, according to interviews- to import corn than to produce it locally. And for the same reason it is of course difficult to sell agricultural products outside the proximate area of production.

3.29 Subsistence farmers in Katanga typically grow the basic foodstuffs maize, manioc, carrots, and peanuts as well as raising poultry. Yields are said to be low, for example corn is two tons per hectare which is insufficient to cover cost of inputs. A case calculation based on data from the URK agronomist on maize is shown in Annex 5 on agriculture; this case calculation reveals that without fertilizer, and without the capital to hire machinery, a farmer with a yield of only 1.5 tons per ha would only make a profit if he/she were able to postpone sales until the season when prices are highest (November, December). During the season when prices are low, the current market price for maize is approximately $150 per ton, while input costs are about $550 to $630 per ha. Therefore, at least four tons of maize must be produced to recuperate the cost. Many farmers are unable to grow more than two tons.69 However, the poorer farmers may have the least capacity to postpone sales, and without a level of comfort to work in a cooperative in order to share input costs, would be unlikely to afford the rental of a tractor alone. URK staff accordingly integrated into their information campaigns encouragement for farmers to form cooperatives.

3.30 Agricultural activity is also prey to endemic theft (including, some people say, by the army), a fact which forces people to seek land that is far removed from the city where they live, and not easily accessible.70 According to data from the URK exit survey, the average distance of land from Gecamines’ households is 28 kms, with variations by location (see table 17). This creates of course problems for the transportation of output, as roads are usually inexistent or bad, thus imposing a limit on the level of production the partants can market far from their land. In Kolwezi, one of the largest cooperative projects involved in commercial agriculture selected land that is about 60 miles away (with very bad roads to get there) from markets.

69 According to the URK agronomist this compares with input costs for 1 ha maize in Zimbabwe of US$300 - $350.

70 This distance may also to some extent protect agricultural production from the preying activities of the tax administration, whose code is extremely byzantine and whose officers have the reputation of sometimes inventing taxes.

71 5% trimmed mean.
Table 17: Key Statistics on Agriculture Potential and Partants\textsuperscript{72}

<table>
<thead>
<tr>
<th>Mining Center</th>
<th>Central (Likasi)</th>
<th>West (Kolwezi)</th>
<th>South (Lubumbashi)</th>
<th>Total/Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Area Cultivated (mode)</td>
<td>2.7 (2)</td>
<td>7 (2)</td>
<td>9 (2)</td>
<td>6.7 (2)</td>
</tr>
<tr>
<td>Average Distance between Cultivated Land and Home (mode)</td>
<td>16.9 (5)</td>
<td>33 (15)</td>
<td>31 (15)</td>
<td>28 (15)</td>
</tr>
<tr>
<td>Among those who cultivate, % that own land</td>
<td>42%</td>
<td>31%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>Percent stating they need additional land</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

3.31 The impact of economic environment on reinsertion. The general economic environment seems to have a strong impact on the determination of reinsertion activities of the partants, and there are marked differences in the choice for reinsertion activities between the different cities of the mining region. Some of the differences may be explained by the quality of infrastructure, Likasi for instance benefiting from markedly better road access than Kolwezi (a fact which may explain the strength of commercial agriculture and transport in Likasi); some may be explained by the diversity of economic activities already existing (a fact which may explain the greater diversity of reinsertion activities in Lubumbashi).

Box 4: Risks to Partants

The large percentage of partants opting for commercial agriculture in Likasi stems from the activities of just one cooperative (Federation des Cooperatives de Kambove) run by a Catholic priest who had little or no experience with commercial agriculture. This cooperative included activities in commercial agriculture, health service delivery and transport, promising significant returns to the people who would bring their money to the cooperative and because of its association with the church, may have engendered more trust than other organizations. According to exit interviews, at least 1,700 hundred partants invested about $1,300 each of their package in this cooperative. It must be noted however that the people who invested in the cooperative are usually not working for it (this is actually not a reinsertion “activity” \textit{per se}) and are simply “shareholders” and most likely have no capital left to invest in a proper reinsertion activity. The lack of viable Banks in Likasi, and distrust of the banking system because of past failures, also prompted partants to “park” their funds with the cooperative to protect them from thieves, and family members or friends who had heard the packages were paid. The Cooperative did not appear to have an adequate business plan, or analysis of markets, and thus approximately half of all the partants in Likasi were at risk of losing their investment. Because it had set up a monitoring system, URK/COPIREP was able to identify this risk, and intervened to strengthen the capacity in budgeting, financial and business required for such a large scheme as these were found to be lacking, posing a risk to the reinsertion program.

3.32 Relocation. It must be noted that moving is not perceived as an alternative: only 1% of partants were planning to move, and the majority of them were simply considering a relocation within the mining region. This lack of geographical mobility could be explained by several factors: the fact that a majority of the partants own their house; the fact that Gecamines employees have put deep roots in the Katanga, roots which are often going back generations and

\textsuperscript{72} Based on a sample of 3040 partants asked this question during exit interviews. Source: URK.

69
the advanced age of most partants; and, lastly, it may be an indication that the population considers the mining region of the Katanga, in spite of all recent hardship, to be better off than most surrounding regions (the Human Development Index computed by a UNICEF survey puts the Katanga -the whole province, and not simply the mining region- in 4th position, after Kinshasa, Lower Congo and Eastern Kasai).73

3.33 Update: A January 2006 draft evaluation conducted under the PSDC project found that 93% of the partants were engaged in some form of economic activity, with a large variation between those engaged in group versus individual projects (the former having average annual revenues of US$28 versus annual average revenues for the latter of US$982).74 These levels of revenue are higher than what the partants received in salary payments in the year prior to their departure from Gecamines and thus the departures program was preferable to its alternative (to do nothing). These revenue levels remain lower than the average workers’ salary that they received before Gecamines’ financial difficulty and reflect the overall economic decline that accompanied Gecamines’ deterioration. If one includes the number of dependents on a partant in his household, then most would be under the poverty level of US$1 per day. However, these projects generated employment as collective projects involved an average of 30 employees of which 13 were permanent and individual projects involved 8 employees of which 3 were permanent. Ex ante field work to monitor the key baseline indicators such as the number of meals per day would provide a more accurate picture of welfare before and after the program.

3.34 The same evaluation confirmed that it is important to address some of the systemic regional issues that were highlighted in the PSIA in order to increase productivity, with a more marked effect on those sites that are more remote (Kolwezi and Likasi); agricultural productivity per project decreased between 2003 and 2004. According to this 2006 evaluation, about half of the production is auto-consumed with the rest marketed, a level that is higher than might have been expected.75 The lack of road networks means that production is sold primarily to clients who are not far; in 2004 84% of the projects in Lubumbashi commercialized their surplus production within the same basin, with substantially higher rates of 89% and 94% in Likasi and Kolwezi, which represents a low level of exchange between sites.

Ancillary Social Services and Voluntary Departure

3.35 The section below explores the direct impact of the voluntary departures program on health and education services, as well as the implications of the workers’ departure for their future access to health and education services.

75 Each project in agriculture and elevage produced 7.7 and 14.5 tons in 2004 compared to 14.6 and 15.4 respectively in 2003.
Education

3.36 As noted in Chapter 2, the voluntary departure program meant that Gecamines workers would no longer have access to the free (or somewhat less expensive) health and education services as they would no longer be Gecamines employees and would eventually have to pay the same higher rates as other non-Gecamines employees. According to the UNILU survey prior to the departures program, the Gecamines households would spend an average of 1,300 FC (US$3.1) per month on children’s education versus 5,252 FC for non-Gecamines households (US$12). Thus, one could expect the cost to these households to increase significantly. Further, for those in Gecamines’ schools, in the short-term their costs would rise to US$35 per trimester per primary school student for blue collar workers (some schools charged up to $45 and some as low as $20) and around US$45 per trimester for secondary and technical school students (varying from $40 to $80 depending on the school). Thus, in the short-term the risk was that these students would have no other places to go given the reliance on Gecamines and would leave or be forced out of school. As noted in Chapter 2, this was particularly of concern in those towns with no alternative schools. Through the PSDC project, an interim solution was devised (see Box below).

Box 5: Impact of Gecamines Failure on Education and Support Emerging from PSIA Scoping

During focus groups discussions both with miners and with parent-teachers associations, the impact of Gecamines’ failure and of the departures program on education was highlighted.

The schools, particularly those where the children of blue collar workers were concentrated, had the unfortunate confluence of teachers who, as Gecamines’ non-core employees, had not been paid in many months, parents who had also not been paid and no external support as schools were classified as private and therefore ineligible for support programs by UNICEF or others. Teachers reported that children would leave school because they were hungry, that there were no notebooks so children would write in notebooks and then erase, teachers would often go on strike or not come to work and that years of no investment led to a degraded physical infrastructure.

When the voluntary departure program was announced, resentment flared up between those who were eligible to leave – and receive a lump sum payment – and those who remained and continued to be unpaid. As a result, some children of partants were told by their parents to keep their status secret, others were chased from school unless they brought funding to teachers. As a result, when Gecamines did an update of how many children of partants were actually in Gecamines’ schools, there were only 14,400 down from an estimated 23,000 in 2003, though it is impossible to determine whether this was driven by a reluctance of children of partants to identify themselves as such, or because these children had left.

Based upon the early PSIA scoping, the PSIA team recommended that interim support be provided to schools (teachers and to keep partants’ children in schools). As a result, a program of support was devised, which channeled resources to Gecamines teachers, in exchange for an agreement to keep the children of partants in school for the school year (it ended up covering two years), and for teachers to show up for work. The entire program was built upon the formation of parents committees, who played a key role in monitoring the teachers’ attendance. According to parents, this program kept teachers motivated to continue teaching through at least two school years.

3.37 The departures program also had an impact directly on service provision because of the decreased number of teachers, as in Likasi where over one-third of all teachers left and classes were subsequently combined or in some cases closed.
Table 18: Direct Impact of Departures Program on Education – An Example of Primary Schools in Likasi

<table>
<thead>
<tr>
<th>Town</th>
<th>GCM Schools</th>
<th>Organized Classes</th>
<th>Students</th>
<th>Departing Teachers</th>
<th>Remaining Teachers</th>
<th>% Change Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likasi</td>
<td>14</td>
<td>308</td>
<td>10,494</td>
<td>60</td>
<td>139</td>
<td>-30%</td>
</tr>
<tr>
<td>Kambove</td>
<td>8</td>
<td>70</td>
<td>3,092</td>
<td>34</td>
<td>35</td>
<td>-49%</td>
</tr>
<tr>
<td>Kasono</td>
<td>1</td>
<td>5</td>
<td>135</td>
<td>1</td>
<td></td>
<td>-100%</td>
</tr>
<tr>
<td>Mangobo</td>
<td>1</td>
<td>7</td>
<td>248</td>
<td>2</td>
<td>4</td>
<td>-33%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>390</td>
<td>13,969</td>
<td>97</td>
<td>178</td>
<td>-35%</td>
</tr>
</tbody>
</table>

Source: Donées recostituées à partir des documents de département général et technique, GCM (Directeur Mbolyo KIMPINDE)

3.38 In this case example in Likasi, fewer teachers prompted the consolidation of the following schools, resulting in more crowded classes and a decline in student-teacher ratios.

Table 19: Consolidation of Primary Schools in Likasi Because of Departures Program

<table>
<thead>
<tr>
<th>Centre/Likasi</th>
<th>Number Students Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likasi EP Tawi with SIFA-YETU</td>
<td>1,325</td>
</tr>
<tr>
<td>Likasi EP Tujenge1 with EP Tugenge2</td>
<td>603</td>
</tr>
<tr>
<td>Likasi EP Makutano with EP Kituluzo</td>
<td>1,010</td>
</tr>
<tr>
<td>Likasi EP Umeme 1 with EM Umeme 2</td>
<td>628</td>
</tr>
<tr>
<td>Likasi EP Shamba1 with EP Shamba 2</td>
<td>770</td>
</tr>
<tr>
<td>Likasi EP Neema with EP Johari</td>
<td>706</td>
</tr>
<tr>
<td>Likasi EP Kisama with EP Salongo</td>
<td>765</td>
</tr>
<tr>
<td>Total</td>
<td>5,807</td>
</tr>
</tbody>
</table>

Health Care and the Partants

3.39 As noted in Chapter 1, free health care was historically provided not only to the Gecamines worker but also to an extended and loosely controlled number of dependents and extended family members who were not dependent, as well as to citizens outside of Gecamines, particularly for secondary health care. As partants would no longer be considered Gecamines’ workers, they would no longer be eligible for this free service and this would thus affect substantially more than 80,000 people (the approximate number of dependents claimed by partants).

3.40 In the absence of a directive on the future of health services, Gecamines health staff devised their own coping mechanisms, including instituting fees, and on a positive note, coming to agreement with some existing donor or government programs to receive some short-term in-kind assistance (such as medicines from Medicus Mundi). However, without a formal policy announced (which as a non-independent unit of a failing company was difficult), the application and understanding of these new policies varied in practice, and in discussion groups a central topic of discussion concerned rumors about what the actual interim benefits might be with many
Gecamines’ employees and partants both somewhat confused regarding their entitlements and the rules. Although most partants reported being asked to pay both for consultation and for specific services (radiology, sonogram, tests), some of those remaining also noted they had been asked to pay for specialized services, yet others noted that in some locations consultations were free and others still thought that a World Bank program would fund their fees for 6 months (this was prior to a subsidy being designed). Others said there was a two track system where Gecamines employees could file for reimbursement of the costs of medicines and paid a reduced rate for services compared to partants and non-Gecamines people.

3.41 Some Gecamines’ workers noted that these health service providers were now slow to provide services to Gecamines employees, since they were uncertain of payment or budget from Gecamines, serving paying customers more expeditiously. Moreover, it is not clear that those remaining at Gecamines are better off in terms of accessing medicines, because as long as Gecamines continues to have financial problems, the speed with which they might get reimbursed would likely be extremely slow and without a salary, Gecamines employees noted they would not have the cash up front in any case.

<table>
<thead>
<tr>
<th></th>
<th>GCM employees</th>
<th>Partants</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>no fee</td>
<td>payment required</td>
<td>payment required</td>
</tr>
<tr>
<td>Laboratory work</td>
<td>payment required</td>
<td>payment required</td>
<td>payment required</td>
</tr>
<tr>
<td>Birth</td>
<td>payment required</td>
<td>payment required</td>
<td>payment required</td>
</tr>
<tr>
<td>Medicine</td>
<td>payment required but can be reimbursed</td>
<td>payment required</td>
<td>payment required</td>
</tr>
<tr>
<td>Radiology</td>
<td>Payment required</td>
<td>payment required</td>
<td>payment required</td>
</tr>
</tbody>
</table>

Table 20: Gecamines Fee Structure for Health Services, 2004

3.42 As in the education sector, the departure of a significant number of staff from Gecamines’ health unit has had an impact on its quality of services. At the end of 2003 out of 1711 healthcare personnel 682 left the system, representing 40 percent of the entire staff. Eligibility for departure, as for other Gecamines sectors, was based on longevity of service and not qualifications. As a result, hospitals lost their only specialists in the unit, such as the ears, eyes and nose specialists at Kolwezi and Likasi, and two out of four pediatricians in the Likasi district. In some cases, doctors have gone into private practice. In Kolwezi it was reported that some partant doctors entered different sectors altogether, including agriculture and as buyers (negociants) in the artisanal mines.
Table 21: Staffing of Gecamines Health Sector 2001 to 2004

<table>
<thead>
<tr>
<th>Gecamines Health employees</th>
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* After the departures program
Source: GCM Departement Medico-Sociaux
4. BACKGROUND TO A POSSIBLE RESTART OF GECAMINES

4.1 Many of the macro-economic benefits of Gecamines restructuring would only be realized if mine production re-started and provided both increased income and jobs to the Katanga community. This report does not seek to cover the future prospects and analysis of the overall mining sector, nor of Gecamines. As noted earlier, some of these issues will be covered in depth in a separate forthcoming analysis on the mining sector. Nonetheless, it is important to understand the context in which the departures program took place, and to touch upon some of the factors and interests that may influence the continued reform of Gecamines and whether it is able to resume production. The unfolding of the restructuring plan would affect the interests of several groups, and principally among them Gecamines remaining employees, the various partnerships that were formed around Gecamines and the small scale miners who have taken over many of Gecamines former exploitation sites. A brief analysis of these groups and their interests vis-à-vis mine reform is presented below. This analysis touches upon small-scale mining, an important activity within the region, but was not meant to fully explore this area, as it constitutes another area of research. In addition, this section summarizes in general some of the options for the future of Gecamines social services.

Reform of Ancillary Social Services

4.2 One principle has emerged during the debate on mine reform; the company must now focus on its core business and shed the welfare functions it had taken on in the past in response to the State's inability or unwillingness to assume them. The main difficulty in the restructuring of Gecamines’ education and health sectors stems from one fact: the economic base which supported these activities is gone, and the structure of the sector has changed substantially (also Gecamines households' ability to pay for health and education services is extremely diminished). The future of these two sectors hinges on the strength and speed of Gecamines' s recovery (the IMC report estimates that in five years time production could be brought back up to 200,000 tons, or about 2/5th of past levels of production), the willingness of foreign companies to invest in the Katanga, and the degree to which any resumed mining activity generates either local resources so that residents have the capacity to pay for services, or general revenues which the Government of the DRC channels effectively and efficiently back into services in the province.

4.3 There are essentially three options for the future of Gecamines health and education services:

(i) Close the services completely. Given the dependence outlined on Gecamines in Chapter 2, this would have the most negative social impact, particularly on some of the more mine-dependent towns such as Kolwezi, Kapushi, and others.

(ii) Continue as is with the two systems finding ways to survive some more years with the hope that a return to industrial activity would provide the economic means of revival. This would effectively have a negative distributional impact as has been demonstrated.
through the trends outlined in Chapter 2. Any new resources coming into Gecamines are likely to be prioritized to getting mine production back up, and to paying core personnel who were not in social services. Schools with parents who can afford to (largely the schools for higher-level staff or about 20% of the students) would likely be able to pay teachers directly, whilst those schools in areas with little alternative income sources and with blue collar parents would effectively close as teachers went on strike for lack of payment. In numerous towns, the lack of alternative schools would likely result in a net descolarization. For health services, it is likely that quality would degrade, and that paying clients would receive better service than Gecamines’ employees, at least until Gecamines provides some budget to this department. This would have a negative impact on the health indicators, particularly those tied to secondary health care where Gecamines plays a significant role (as Gecamines provided between 42% and 65% of hospital beds in the basin). Mining towns such as Kolwezi, Likasi and some of the smaller mining towns are more vulnerable than others to the impact from the potential failure of these services because they are substantially more dependent on Gecamines.

(iii) The third option would be to assess which facilities could be privatized or transferred to third parties (parochial schools for example, or parent committees which may already be playing an active role in school management) with a good track record, which could come under state control, and which might remain with Gecamines or with other mining companies that would want to retain some core set of services for employees (technical schools for example). Stakeholders who participated in a workshop on PSIA findings in Kinshasa in June, 2005, recommended that a version of this option be adopted whereby assets are separated, or at least ring-fenced, from Gecamines, and in the interim that ownership revert to the state while the specific management arrangements are worked out as transitional support is provided. Under this option, a critical assumption is that there is a timetable for making decisions on social assets, and that there are resources for this interim period to support the continued functioning of the social assets. At this stage it is not clear that either exists.

This option could include scenarios where the management of schools or clinics falls under the private or parochial sector, with government regulation and/or funding for certain elements such as salaries or where the government enters into a management contract agreement with private or parochial managers as has been done with NGOs in the health sector. The social implications are that the schools with the poorest parents (those which are in isolated areas and those with blue collar workers) would most likely have the least interest from parochial or private interests, and would be the most likely candidates to revert to the state. State schools pay less for teachers, and at least during the PSIA research, were among the weakest, receiving very little public resources and accounting for only 7% of the students in the basin. This option requires detailed analysis of all the assets; under the PSDC, two studies were commissioned after the PSIA research on the potential options for the most significant social services, health and education.

4.4 The resistance or support for mine sector reform can be affected by the degree to which stakeholders in Katanga feel that they have a voice in the evaluation of the detailed options.
This message emerged clearly from the June, 2005, workshop, in which participants recommended that the working groups that had been formed and the participants continue to play a role in this debate.

**Mining Sector Restart**

**Gecamines remaining employees**

4.5 In 2004 there were still 12,800 employees remaining within Gecamines, who were not being paid, and the external managers had not yet been brought into Gecamines to improve its operation. Following the discussion of the PSIA draft report produced by the University of Lubumbashi in June, 2005, an international management team was brought into Gecamines. Reports from 2006 indicate that salaries are now being paid regularly, a substantial improvement from the per-departures situation. 76

4.6 The initial analysis of Gecamines (IMC report) estimated that between 4,000 and 5,000 employees would be required for restarting Gecamines operations, but that many of the 12,800 remaining employees may not have the skills to work in modernized mining and processing activities. Thus any future departures program would have to be based on a selection according to skills. Given the current skill mix among Gecamines staff, qualified employees would have to be retrained but also new employees with the adequate skills would have to be hired (hence the total number of workers that could be retrenched would be greater than 8,000). This human resource issue will be, according to the IMC report, the most delicate phase of the restructuring.

**Gecamines partnerships**

4.7 Over the years Gecamines and the government have entered into agreements with various, mostly medium-size, investors, in essence bringing mining concessions to the table in exchange for cash. The IMC report which was completed in late 2003 deemed that most of these agreements were lopsided, for the most part because they were not well negotiated. They did, however, represent potential revenues reaching in the billions of dollars. IMC recommended that all partnerships be renegotiated. Some of these partnerships have so far translated only in feasibility studies, as with the partnership around the Tenke Fungurume deposit,77 and have been mostly dormant since 1997 (these are Tenke Fungurume Mining and American Mineral Fields, both quoted on the Toronto exchange, and Kumba Resources from south Africa), and some partnerships are actually operating.

4.8 Some of these partnerships are involved in the production of cobalt:

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76 Although there may still be cases of “catching up” from the period when salaries were not paid – an issue which would likely emerge in association with any future voluntary departure operation.

77 The feasibility study for Tenke has cost $52 million, of which $13 million of interests, since the partnership is being financed by loans instead of capital.
• The largest is the STL smelter (55% OMGroup, 25% George Forrest International, 20% Gecamines), which cost $130 million to build (it is the second biggest electrical smelter in the world), employs about 300 people and produces about 3.000 tons of cobalt a year (plus unknown quantities of germanium) by treating old mine rejects from a slag heap in Lubumbashi.
• The mine of Luiswishi (50% George Forrest International and 50% Gecamines) produces about 5,000 tons of cobalt and 10,000 tons of copper a year.
• The company Felco has invested about $5 million for a plant which is expected to produce about 2,000 tons of cobalt a year (60% of benefits reverting to Gecamines).

4.9 Compared to the scale of Gecamines in the 1980s, these remain marginal operations at least in terms of copper production. It is not clear whether a full scale revival of Gecamines would be in the best interest of these partnerships, particularly if the terms of the agreement are to be renegotiated, as was suggested by IMC. This situation has evolved since 2004/5, and more recent agreements have not been covered here. This issue will be covered under the forthcoming report, Mining Growth with Governance.

Small scale mining: Digging in the Rubbles

4.10 As illustrated in Box 6 small scale mining has grown tremendously in the past five years in Katanga, with an estimated 60,000 workers involved in this activity. It has become particularly important in the mining basins of Kolwezi and parts of Likasi, and represents one of the key occupational areas for the children of current and former Gecamines miners. The activity also carries with it benefits in the form of direct income, as well as social costs such as competing with school attendance, hazards from occupational safety, lack of regulation of working conditions and involvement of children which are worthy of further analysis.

4.11 In response to the desperation that many people experienced from the mid-1990s on, artisinal exploitation of copper and cobalt ore offered a means of survival, particularly important in areas cut off from transport and other forms of economic activity such as Kolwezi. Initially the digging occurred mostly in old Gecamines mines, and particularly in the old “remblais” which surrounded them and are rich in cobalt deposits (copper deposits usually are found under an initial layer of earth, or cover, which used to be pushed to the sides of the excavating sites; when these mines were started cobalt had few industrial applications and was ignored). The “digging” for copper may have started initially with women and children of miners picking up extracted copper ore which had fallen off conveyor belts or trucks around Gecamines mines (as was done around European coal mines). The digging has then extended to the richest veins of copper deposits in old Gecamines mines and then in unexploited concessions. In 1998 the Minister of Mines (Mr. Kibassa) gave the Government's official approval and guidelines for such artisinal exploitation are incorporated into the new mining code (2003).

78 George Forrest International is the name of a company based in Lubumbashi. George Forrest, who has spent all his life in the Katanga, is said to have close relationships with the people in power in Kinshasa and for years has been one of the very few investors and entrepreneurs to dare operate in the Congo.
4.12 As noted earlier, given the lack of growth in formal mine employment over recent years, the next generation of Katangais in the mining basin has turned towards artisanal mining. Cobalt used to be simply the by-product of the exploitation of copper (the Katanga's deposits contain about 1 ton of cobalt for every 10 tons of copper), and Gecamines until 1990 used to control the market through a cartel agreement with Zambia (selling about 15,000 tons). Today, cobalt extracted from heterogenite is the main mining product coming out of the Katanga (according to a former Gecamines manager, only 30% of the copper content of heterogenite is being exploited, the rest being wasted) and the heterogenite exploitation is mostly driven by the rising world prices of cobalt (it reached $25 a pound in February 2004, from $7 two years earlier).

4.13 Most of this artisanal mining is done by gangs of “diggers” or creuseurs working with picks and shovels on the site of old Gecamines mines or in until then untouched concessions. The Association d'Exploitants Miniers Artisanaux du Katanga (EMAK), is the sole organization representing the diggers. These diggers operate in mines around Kolwezi, as well as in Likasi and to a lesser extent in Lubumbashi (see Table 10 in Chapter 2). The ore is exported to Zambia, South Africa or China (China seems to be a large importer of cobalt ore), after having been concentrated further so as to bring down transport costs. The export of unprocessed ore (heterogenite) is discouraged in the new mining code because it means the bulk of the mineral’s value leaves the country.

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79 In 2003 there had been 40,000 licenses issued for artisanal mining. However EMAK representatives in Kolwezi have said that not everybody is registered yet, and observers estimate that at the end of 2003 there were about 60,000 small scale miners.

80 According to the manager of Swanepoel, a company based in Likasi, in the last couple of years farmers in the Likasi region have started to abandon their plots to join the diggers, even though the soil in that region is reputed as very rich. That movement may have been triggered or amplified by the drought which occurred during those years.
Box 6: Creuseurs: Local Distribution of Benefits

Small-scale mining on former slag heaps has grown dramatically in recent years, particularly in certain centers such as Kolwezi, where cobalt in its raw form – heterogenite – is concentrated. Rough estimates place about 60,000 workers in this activity, most on a daily basis, which involves digging often dangerous holes in many of the former Gecamines mine sites. While artisanal mining provides some direct income to Katangais, where there are few alternatives, some say that it is eroding the future value of the mining reserves and their attractiveness to larger investors who might be able to upgrade processing, and thus is coming at a high cost to the future national wealth. The change from formal employment under Gecamines to this informal employment has implications not only for mining, but for the social stability within the region and for the level of overall education.

The digger or “Creuseur” is the person who actually descends into hand-cut holes that largely lie in top of very fine old mining waste digging a large well, at least 20 feet deep, to reach the area where the deposit is, and to then dig narrow galleries going more or less horizontally and following the vein. The shafts are therefore very unstable, particularly when the rainy season comes. This is often organized into gangs of 4 – 5 people, often young men or those from other sectors (during a typical visit, the following were encountered mining - former University students, a former doctor, young people who had dropped out of school or who were earning fees for school, and a former professor). 1 to 2 tons in a day is considered a good amount of heterogenite to have from a group of 4 to 5 people. In some groups a share of the proceeds is reserved for either drugs or alcohol which are consumed to allow the creuseurs to proceed with their work. This has become a source of addiction for those joining the teams as this allocation is “mandatory” according to several groups interviewed. Teachers interviewed noted two phenomenon: first, that children and young adults went to work in the mines to earn school fees which allowed them to stay in school and second, that some of them never came back.

The Transporter: Diggers are assisted by sifters (or concentrators) who select the cobalt or copper out of the extracted earth, and by handlers who put the product into 50 kg bags and carry them out of the extracting site and near a road (100 – 150 cf per bag). Small traders (called “négociants”) then come into play, buying the bags and arranging for transport¹. These traders then resell the bags of ore to large traders or sometime directly to entrepreneurs who concentrate it further. The three largest trading houses are Groupe Bazano (run by a Lebanese), Chemicals of Africa or CHEMAF owned by an Indian based in Canada, and Société Minière du Katanga or SOMIKA. Prior to October 2003 these houses did not pay any fees to concession owners. However, after this date they were to share half of their profits with Gecamines.¹ According to Gecamines officials in Kolwezi, this has allowed them to start paying their employees again in some areas. The heterogenite is taken to a laboratory – usually Gecamines’ laboratory for those who are current or former workers – to assess quality of the ore in terms of percent concentration of metals. One complaint voiced by miners was that there was no independent laboratory (each House also has its own laboratory) to verify concentration levels and, as payment is tied to the degree of concentration of minerals in the heterogenite, there is room for underpayment.

EMAK is supposed to ensure safety of workers (ensuring that mining does not continue when the rains start for example) and to represent their interests. However, EMAK is reportedly dependent on some of the Trading Houses for their operating funds, and thus has not been as active as they could be in pursuing independent laboratory verification of the concentration of cobalt (which is the basis for determining payment).

Much of the minerals leave Katanga in raw form unregistered, and thus value is added outside of the country. There are an estimated 40 fondeurs who re-purchase the minerals to transform them for
exportation, but many of these are associated with the large trading houses noted above. Several local actors profit from this trade. This includes but is not limited to: (i) The “chargeur”: This is the person who loads the production onto the trucks and who receives 50 – 100 congolese francs a bag; (ii) municipal and provincial governments who receive various taxes such as a tax paid by bag of 50cf/bag = 1600cf/ton or about 5000cf/month, and an annual tax for the storage of heterogenite in depots in Lubumbashi of US$200/year; (iii) EMAK who sells licenses for 2000cf/year; (iv) Mine police who receive fees (not Gecamines mine police); (v) INR (= secret intelligence agency equivalent).

4.14 New entrepreneurs. In any event this artisinal mining industry, if not large compared to Gecamines production levels, does represent income for a desperate population, as well as business opportunities for new entrepreneurs. Small processing centers for cobalt and copper have emerged in the last three years: Near Lubumbashi an entrepreneur who had been operating in the Congo for the last 15 years invested in early 2003 $6 million to start such a processing unit, which has 175 people on its payroll\(^1\) and employs about 300 day laborers. A certain number of small electric smelters have been financed by Congolese or foreign investors.\(^2\) There were about 10 such centers operating in 2005.

4.15 The debate around small scale mining. There is considerable debate in the Katanga as to the nature and legitimacy of this “digging” activity. The diggers, through the voice of EMAK's officials, contend that they are simply extracting copper and cobalt either in old Gecamines mines which are no longer operating, or in concessions that were never exploited but which are not rich enough to warrant an industrial extraction. Others, including Gecamines managers, officials of the CAMI (Cadastre Minier, the agency in charge of implementing the new mining code), managers of Gecamines's partnerships as well as officials of Gecamines's unions contend that if EMAK's assertions might have been true some time in the past, they are no longer accurate. They assert that the diggers are actually extracting the ore from the richest veins in the deposits (thanks in part to the help of Gecamines geologists working as consultants), and thus making the whole concessions worthless for future industrial extraction (industrial extraction cannot single out the richest veins of a deposit and thus depends on the average ore concentration for its profitability. Singling out the richest veins lowers the average concentration of the concession and brings it under the profitability threshold).

4.16 The Government of the DRC initiated a reform of its mining code, which has involved a process of redistribution and clarification of the mining concessions. EMAK has requested that some concessions be set aside for the diggers. The diggers have been advised to organize themselves into cooperatives and apply for concession rights (the difficulty involved by the complexity of this process, particularly in a region with no tradition of such forms of collective action, makes this prospect unlikely).

4.17 The future of small scale mining. The resumption of large-scale mining would affect the competitiveness of small scale exploitation, as substantial amounts of cobalt and copper would potentially affect world copper and cobalt prices and as the economies of scale of large

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\(^1\) Apparently none of the people working there had previously worked for Gecamines. The entrepreneur explained that Gecamines staff he met had too high expectations and were too demanding.

\(^2\) For instance Bernard de Gerlache, President of the Belgo-African Chamber of Commerce, or Billy Rautenbach, a Zimbabwean who manages Exaco and was at the end of the 1990s Directeur Général of Gecamines have done so.
production may be difficult for small traders to compete with. In addition, those investing in such large-scale production will most likely put an end to any such exploitation in their area of concession. This would drive out the artisanal miners, and could pose challenges in terms of how this next generation would find employment.

4.18 The IMC report suggests that the exploitation of heterogenite be maximized in the short term and that long term solutions be explored through an organization involving all the cobalt producers, and that in that context a progressive professionalization of the small scale mining trade be pursued. However, the diversity of actors and of interests, the differences in cost structures among the different types of operation are such that it is difficult to see which incentives could be powerful enough to bring all parties to compromise and actually implement an agreement that would be drafted by technical and social experts.

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83 Indeed, according to the IMC report a restart of Gecamines copper extraction could reach 100,000 tons in less than a year, thus bringing onto the market 6,000 tons of cobalt (and in five years 200,000 tons of copper, or at least 12,000 tons of cobalt)
5. CONCLUSIONS AND RECOMMENDATIONS

5.1 An unusual restructuring case: Unlike most restructuring operations, which involve closing an aging and/or unprofitable operation, the restructuring of Gecamines seeks to create more favorable conditions for a possible restart of production. Indeed, the company, which produced almost half a million tons of copper metal in 1989, was producing only about 12,000 tons a year in 2004; yet it is sitting on considerable and rich copper deposits and the world’s largest share of cobalt reserves. The Government thus had decided to restructure this public enterprise, along with many other public concerns, while at the same time opening the mining sector to private foreign interests.

5.2 Gecamines’ current predicament is the result of an institutional rather than an economic failure. In the 1970s the company was brought under the complete control of the government, and its management underwent “Zairinisation” (which meant that all foreign managers were forced out). The company became a revenue source for the Mobutu regime, and its management, which was appointed through political channels, proved unable to define an industrial strategy nor to manage operations in a coherent or commercially oriented fashion which would protect the long-term interests of the industry. As a result, mine extraction processes degraded and became outdated, and DRC lost its competitive edge in world copper markets. The deterioration of the political situation in the 1990s and the country's consequent international isolation provided a background to, and further reinforced the dysfunctionalities of Gecamines's management, and the decline in production.

5.3 However, the lack of a commercially oriented strategy also permitted the provision of a high level of social services (high quality health, education, social infrastructure) to Gecamines’ employees and their extended families up until the past few years prior to the departures program. The lack of strategy also meant that for years beyond when production had dropped the company had maintained -at least in appearance- most of its employees and social services, opting to accumulate massive debt instead of reducing its staff size or social charges. The voluntary departures program represented the first step in a strategy for overhauling the company, and streamlining its focus on core mining operations.

The social cost of restructuring:

5.4 A rapid analysis of transmission channels identified short-term impacts from the departures program such as inflation from the influx of payments and exchange rate fluctuations which would spill over into the general population, theft of monetary packages from partants, and deposit of partants’ packages with schemes that were not viable. Several of these risks were mitigated by actions taken by the URK/COPIREP project office in Katanga such as the creation of a multi-stakeholder consultative committee including, but not limited to, representatives of the Governor’s office, Central Bank, sectoral stakeholders, unions and others, intervention with financial institutions to ensure sufficient currency, communications campaigns, technical advice to some of the largest cooperatives to improve their financial management and business planning skills, and outreach by local leaders to minimize these risks.
5.5 In terms of the projected medium-term impacts, the PSIA found that the situation of the miners had deteriorated so substantially during the decline of Gecamines prior to restructuring that the direct impact on wages and employment would be insignificant compared to traditional downsizing programs. Data on consumption revealed that before restructuring, in 2003, Gecamines’ workers were in fact a vulnerable group not only within Katanga but compared to the average Congolese and would likely remain so if they stayed with the company and if the insolvency of Gecamines was not addressed. More recent data shows that today Gecamines employees are being paid regularly and therefore that the welfare of the remaining employees has improved. Nonetheless, most former Gecamines employees are earning less than they were at the height of Gecamines’ production several years back when production. It is important to note that this is not the case for all partants and there are many success stories that have been documented by the monitoring team in URK/COPIREP.

5.6 The second major risk identified initially was that Gecamines employees who were leaving and their children and associated extended family would lose their health and education benefits as well as their subsidized (or in some cases free) water supply and electricity at a time when they were adjusting to life outside of Gecamines. They would thus pay more for these services. Following the departures program the health services instituted fees, and the schools instituted motivation payments for teachers. In addition, because the initial PSIA analysis was fed into discussions both with the URK/COPIREP office and other stakeholders, a transitional support for the children of partants and for the teachers was provided to ensure that an abrupt introduction of fees in schools did not result in a sudden decline in scholariation. Similar transitional subsidies were designed for the health sector, though this took longer to put into place. Another effect which emerged from extensive discussions with partants is the psychological impact and sense of shame that some partants had after a lifetime with Gecamines.

5.7 The reconversion project of the overwhelming majority of partants is in subsistence agriculture and the PSIA found several factors that could constrain the potential for income from this activity: the lack of a good transport infrastructure not only makes the marketing of agricultural products problematic but also increases the costs of production (through the high cost of inputs); security is a serious concern and forces people to cultivate plots that are far away from their home in urban areas, imposing additional costs and constraints to the development of production particularly for older workers; the partants have little knowledge of agricultural techniques, and the Katanga province receives among the least agricultural extension services compared to other areas of the DRC; distortions in the markets for inputs such as fertilizer (which is controlled in part by the governor’s office) further hamper access to competitively priced inputs at the time of year when they are needed; partants themselves have very limited experience in managing an economic activity and do not easily associate with others for collective action (the Katanga is one of the provinces with the lowest level of NGOs and associations).

5.8 The support for economic activities in agriculture provided by one project (URK/COPIREP) cannot replace the broader need for public or privately provided extension services as it is likely that project interventions in agriculture would have the potential to reach roughly 27% of partants (see Annex 5 on agriculture), less than the three quarters who stated they would focus on this sector. Another risk associated with reinsertion that was identified by the monitoring team stemmed from the low level of NGOs and cooperatives, which meant that some of the new ventures that partants were involved in were with organizations or cooperatives that did not have the requisite experience in marketing, business planning, and financial
management. This risk has been partially mitigated by interventions by the URK/COPIREP office to provide training to some organizations, and in one case to provide several consultants to improve the cooperatives’ financial planning and budgeting. The lack of trust in the banking system created a pressure for partants in places such as Likasi to find a place to guard their funds, and this may have created a rush to invest in some of these schemes. A 2006 draft evaluation found that partants were able to market roughly half of the agricultural and livestock that they produced, but that problems with transport and roads limited their ability to market outside of their immediate area. In addition, the lack of entrepreneurial skills among partants often meant that they were engaged in similar activities, rather than diversifying into areas with less competition.

5.9 At the time of departure, the PSIA identified some sub-groups of partants as likely to be more vulnerable than others, with the most worrisome overall characteristic being their advanced age and the fact that most had worked at Gecamines their entire adult life (32 years with the company on average). Further, their culture of dependence on Gecamines would make many of them (managers and directors aside) less able to cope with the requirements of working in the informal and entrepreneurial sector. Some of the most vulnerable groups among the partants include widows who are partants themselves (410 people), the partants (3,796 people) who did not own their home at the time of departure and approximately 25% who had more than two dependent children of school age to support. About 3% of partants at that time could be considered as at risk for extreme vulnerability because they demonstrated several potential markers for vulnerability simultaneously (over 60, living in precarious housing, over 2 dependent children of school age). Another group identified as vulnerable are retirees who are not receiving their pension because of Gecamines’ financial problems.

5.10 Indirect effects of the departures program included a further deterioration in the quality of education and health, though it is difficult to separate out the effects on service quality of lower budgets for these sectors because of Gecamines’ insolvency from the effects of lower staffing because of the departures program. In the education sector classes were combined because one third of all teachers left, resulting in a net increase in the ratio of students to teachers. Similarly health care quality was reported to have been affected by the departure of medical and nursing staff, though the dramatic declines in Gecamines’ funding for these services also caused problems.

Transformation and Transition in Katanga Province

5.11 Early in the PSIA analysis, it became clear that the largest social impacts stemmed from a fundamental transformation of the Katanga region because of the failure of Gecamines and consequent delayed reform of the mining sector, more than from the direct impact of the departures program. This transformation traces its roots to the decline in mining production which has resulted in several changes: (i) A decline in formal sector employment within the region which affects job security, and the level of services and benefits provided; (ii) higher cost services as a result of the reduction in subsidies as Gecamines health and education services start to align their prices with those of the private sector or religious service providers and as there is a movement towards more informal mining and agriculture (as has occurred with the shift towards artisanal mining, particularly for the next generation of workers); (iii) health services will increasingly cater to more non-Gecamines patients who can pay (30% of all laboratory work is
done for outside patients); (iv) a decline in the quality of health, education, water and electricity services all linked to lack of payment by Gecamines and budgets which dwindled to almost nothing by 2003; (v) less distinction in benefits and salaries between those working for Gecamines and those working for other sectors than in the past; and (vi) a much greater emphasis by the population on the agricultural sector and artisinal mining as replacements for the formal sector employment Gecamines once provided.

5.12 The lack of clarity on the transitional plan for Gecamines social services (the definition of a process, timetable, and funding) also contributed to the decline in service quality, encouraged vandalism and strikes, discouraged maintenance and reflects the paralyzed management structure within the company. Interim support was provided, partly in response to some of the early findings of the PSIA analysis, and this served to keep Gecamines children in school and teachers functioning for at least two years, and to keep some interim support for health services. However, the definition of a timetable, and a process for stakeholders to participate in decisions on the future of these services remains essential to keeping support for the mine sector reform.

Recommendations and Policy Options:

5.13 The experience with the departures program are important as Gecamines was the first major parastatal reform in post-conflict DRC, and therefore lessons on how to minimize the social impact are salient not only for this reform, but for other parastatal reform that is ongoing or planned. In summary, the sudden launching of the departures program did not give sufficient time to the project office to set in place reinsertion activities and this created a disconnect between the time when partants had the bulk of their funds and the time when they were ready and trained to actually use them (which was generally later). Nonetheless, the local project office’s ability to set up an effective monitoring system, to set up a multi-stakeholder committee at the local level, and to be pro-active in addressing problems as they arose was quite positive. Also important were having a sufficient number of people on the ground in the local project offices over a sustained period of time as partants typically have the most need not at the beginning, but once they have started to launch themselves into reinsertion activities and encounter the limits of their skills. In the future, providing some advice to partants prior to them leaving Gecamines would be productive. Actions to address the sense of shame, such as providing a certificate of years of service, could assuage some of the psychological stress that dominated discussion among older partants.

5.14 One project cannot make up for some of the systemic issues which will influence the future economic welfare of the province and of the partants and it is here at the macro policy level that there are several areas for improvement:

5.15 The existing social funds and infrastructure services should be oriented towards actions that would facilitate the transition from complete dependence on Gecamines. This would include prioritizing funding for road rehabilitation according to economic criteria so that the routes connecting areas with agricultural potential are linked to markets, thus eliminating the current inefficient trade patterns. A key route for rehabilitation is the road linking Kolwezi and Lubumbashi. In addition, if at least the interim management and ownership of the Gecamines schools is worked out, Gecamines schools and parent associations should be eligible to receive funding for long overdue rehabilitation. This may require some pro-active information campaign
on how to participate in such programs for parents associations in these schools. Similarly, Gecamines schools for blue collar workers should be eligible to participate in existing school feeding programs.

5.16 Problems with the banking sector proved challenging for providing a safe haven for partants packages and for encouraging them to save in the absence of informal savings mechanisms. The project team attempted to negotiate agreements to exempt partants who placed their deposits in the Banks from high minimum requirements or usurious fees, but not all banks agreed. Even where these issues had been negotiated, the legacy of past Bank failures and consequent mistrust in the safety of funds meant that many partants preferred to keep their packages with them, making them more vulnerable to being spent on urgent family needs. National policies and actions to revive the banking sector, improve consumer confidence in the security of deposits and conditions for deposits, its transparency are essential elements not only for reconstruction but for future departure programs.

5.17 The previous tendency to assume that the mining basin has a substantial portion of its public sector needs met through the mining sector is no longer correct and the current realities need to be taken into account in national planning and budgetary processes. This was initiated during a workshop in 2005 (see below) by including the PRSP focal points in discussions, but it needs to be sustained. The risks of failing to take the transformation of Katanga into account include a decline in levels of scolarization, further deterioration of health indicators and social instability and this therefore should be a priority. Some specific areas for attention include: the public resources for agricultural extension need to be increased for Katanga province so that they are at least in line with that of the national average, or increasing the number of people served from 2.2% of the population up to at least 9.4% of the population. A strategy for developing the potential of this sector, and diversifying the economy in Katanga, should be a focus of agricultural policy makers.

5.18 Budgets and planning for the Ministries of Health and education will need to take into account the increase in demand on public services as a result of Gecamines decline and its changed role. Urgent needs are to assess the management options of the largest hospital in the mining basin, Sendwe, as well as the options in towns where there are only Gecamines’ services (Kipushi, Mangombo, Kambove, Kakontwe, Kasonga, Kando, Luena).

Restructuring of health and education sectors:

5.19 On a general level, the results of the University of Lubumbashi’s work on the PSIA and broad options for the future of Gecamines social services were discussed during a multi-stakeholder workshop in Kinshasa in June 2005. There was some consensus on the need to ring-fence or separate social assets from Gecamines, while exploring the detailed options and implications for the future management of these services. Such a detailed sectoral analysis for health and education was recommended in the early scoping for the PSIA, and subsequently commissioned under the PSDC project. While the results of these studies were not available at the time of the national stakeholder workshop, the workshop sought to initiate a broad process of consultation and discussion, and to raise the awareness of national level stakeholders on the need to integrate the changed circumstances in Katanga into their planning and into the PRSP,
and on the impact of continuing to leave Gecamines social assets in limbo and of not moving forward on mine sector reform.

5.20 Participants in this workshop emerged with several recommendations: that the recommendations of the report of Gecamines (by IMC) be put into place; that lessons be learned for the future departure programs; that an emphasis be placed on adopting reforms outlined in the Katanga province regional agricultural conference in order to facilitate the diversification of the regional economy; that Gecamines basic social services be separated from mining and transferred to the State as an interim strategy to allow donors and others to provide assistance and then to have the state negotiate with interested parties concerning the future form of management of these services after the detailed sectoral analysis had been completed (see Annex 4 on recommendations from the workshop). The participants underlined the importance of having a consultative process where the detailed consultants reports are shared and the implications of each option are openly evaluated. This may require the formation of a sub-committee on social assets, possibly under COPIREP, which could facilitate the involvement of Katanga stakeholders as well as coordinating with sectoral ministries and development partners.

5.21 Developing a consensus on the specific options for Gecamines’ social services will require a clear process for the consultation of a variety of stakeholders in Katanga who should have some voice in these decisions, and who should be able to access information on the implications of different options for user fees, government budgets and the quality of services. The timeline for taking decisions on the future of social assets should be clarified with some interim support. In mine reform cases such as this (as in Zambia) a holding company is normally formed for such assets in an interim period with an oversight committee which could represent the various stakeholder interests. Finally, oversight committees of stakeholders and appropriate experts would be required to ensure that in cases of privatization those taking over or buying assets had the capacity to do so and were not planning on stripping the assets. Some of the specialized schools and health facilities that are considered strategic for mining companies, once revived, could be kept in the holding company for a planned transition period. Those that fall into this category include technical schools, which might be needed to improve the skills level of miners to make them competitive, and factory clinics that, among other things, focus on occupational health and safety and that are within the mine sites.

5.22 Even before a medium term strategy is defined it is important that both the health and education sectors be brought even temporarily under a different managerial structure (which would be best defined with input of the current heads of the two departments). While the assets could revert to the State via a holding company (assuming there were both an agreed timetable for decisions and resources to support the interim period), it is important to recognize the importance of the continued involvement of both stakeholders and COPIREP in actively managing this transition as the focus of the existing staff in the Ministries of Health and Education is on a much broader mandate and the capacity to deal with such urgent issues is weak.

5.23 Social impact of a possible restart of mining activities: The previous section dealt with the cost of failing to restructure Gecamines and to reform the mining sector. Chapter 1 illustrated the magnitude of the potential revenues that could be generated from mining if mine reform were to continue and institutional issues were to be addressed. However, the blockages such reform may encounter have to do with who controls and keeps these revenues. In theory,
companies would pay taxes to the Government and the population of Katanga would benefit from an improved level of public services and better conditions for growth as these revenues were invested in public services and infrastructure. In practice, the issue of which revenues remain in Katanga will likely be a sensitive one given a long history of push and pull between the central government and regional stakeholders in Katanga.

5.24 **Constraints on intervention and stakeholders:** The main structural factors which were at the root of Gecamines inability to respond quickly to market forces need to be addressed if the restructuring process is to bear fruit (where stakes are high, given potential revenues).

5.25 Further, the main structural factors that were initially at the root of Gecamines inability to respond to market forces (centralization of power in Kinshasa, control by the political establishment of public enterprises and of the economy, widespread corruption, weak or absent judicial system, lack of managerial skills, lack of transparency in public expenditure management and resource allocation) need to be addressed for the potentially increased income from Gecamines to provide public benefit. Eventually, mechanisms of social accountability, participatory public expenditure tracking should be incorporated into a strategy for improved governance. Along the same lines, investors are only likely to engage substantially if the governance and transparency of mining regulation and contracting improves.

5.26 In 2003, indications were that a revival of the formal mining sector would require only about 5,000 employees. However, the skill mix of the remaining employees was not considered to be adequate, and a restart would require both the training of qualified employees and the hiring of new employees. As a result, at that time it was estimated that more than 7,000 employees would potentially have to be retrenched. The remaining employees are younger than the partants of the first wave, but it is probable that most of them would opt for the same types of reinsertion activities, i.e. agriculture (subsistence and commercial) and small trade. However, it would be advisable to first prepare the reinsertion activities based on lessons learned during the first wave, prior to implementing a departures program. Given the rapidly evolving (increasing) number of actors in the mine sector following elections, this assessment would likely need to be updated to reflect the current situation.

5.27 A primary activity for many of the unemployed youth, particularly in more isolated centers that were dependent on Gecamines, is in artisinal mining of heterogenite on former Gecamines exploitation sites and, according to some reports, on Gecamines concessions that had not been exploited. A restart of Gecamines operations would likely have two effects: new investors would not likely want artisinal miners to be exploiting their areas, and the resumption of large-scale mining would bring likely more cobalt on the market than the small scale miners are currently producing. Given the limited size and volatility of the market, this additional output would be likely to depress cobalt prices to a level that would make small scale mining operations less profitable.

5.28 Little is know about small scale miners and in the perspective of a restart of Gecamines operations it is necessary to have a better understanding of this population. Anecdotal evidence seems to indicate that most small scale miners are young people with a minimal level of education, and they may well represent a threat to social and political peace once their source of income will have dried out, particularly if some politicians see in them an opportunity to gain bargaining chips in their dealings with Kinshasa (there has been substantial analytical work on the
link between young disenfranchised young men and a rise in conflict). However, this is a priority area for future research.

5.29 Therefore, the resumption of mining requires a pro-active approach towards providing opportunities for the employment of youth, and for an investment in education and skills training so that the next generation of Katangais is equipped to be productive in a more diverse regional economy.
ANNEXES
Annex 1: Methodology

The PSIA is built upon two research projects carried out by the University of Lubumbashi (UNILU): a baseline socio-economic analysis carried out prior to the reform and b. a social and impact analysis of the impact of the reform, and the impact on ancillary social services. Two primary quantitative data sources were used: the baseline survey by the University on a sample of Gecamines (GCM) and non-GCM households, and an exit survey administered to partants prior to their leaving Gecamines. The latter was administered to 10,654 partants though some more detailed questions were added after the exit interviews had started (thus to about one third of those leaving) and some other more detailed questions which were time consuming were administered to a sub-sample (for example, every 10th household). However, the majority of questions were administered to all partants.

For the UNILU baseline, the following methods were used:

1. Sample Size and Selection of Baseline

This baseline took place before the departures program started, and covered a total of 600 households of which 480 were Gecamines and 120 for a control group of non-Gecamines. The results obtained from this sample were treated with SPSS.

2. Distribution of Sample by Site

- GCM Households

**Distribution of Sample Households by Site and By Socio-Professional Category**

<table>
<thead>
<tr>
<th>GCM Employee Status</th>
<th>Southern Group 148 Workers</th>
<th>Western Group 182 Workers</th>
<th>Central Group 152 Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leaving</td>
<td>Remaining</td>
<td>Leaving</td>
</tr>
<tr>
<td>MOC84 Manager/Director</td>
<td>17</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>MOE85 Blue collar</td>
<td>73</td>
<td>46</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>58</td>
<td>91</td>
</tr>
</tbody>
</table>

84 MOC : Main d’œuvre Cadres
85 MOE : Main d’œuvre d’exécution (ouvrier)
• Non GCM Households

Tableau n° 3 : Répartition des ménages hors Gécamines par groupe et par catégorie socio-professionnelle

<table>
<thead>
<tr>
<th>Strates Site</th>
<th>Travailleurs</th>
<th>Indépendants</th>
<th>Sommes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groupes Sud</td>
<td>17</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>Groupes Ouest</td>
<td>27</td>
<td>18</td>
<td>45</td>
</tr>
<tr>
<td>Groupes Centre</td>
<td>23</td>
<td>15</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>51</td>
<td>118</td>
</tr>
</tbody>
</table>

c. Mode de sélection

* Ménages Gécamines

La sélection à l’intérieur des ménages Gécamines s’est faite de manière aléatoire stratifiée, étant entendu que chaque élément de strate avait la même chance d’être représenté dans l’échantillon. L’équipe a eu recours à l’utilisation des tables des nombres au hasard.

* Ménages hors Gécamines

Les ménages hors Gécamines ont été tirés selon le critère de voisinage avec les ménages Gécamines, c’est-à-dire que l’enquêteur devrait retenir le cinquième ménage vivant dans le voisinage des l’un de quatre ménages Gécamines déjà identifiés.

Sur l’effectif de l’échantillon hors Gécamines, on a pris 60% des indépendants et 40% des travailleurs hors Gécamines. La sélection des ménages hors Gécamines était alternative, à raison de deux travailleurs pour trois indépendants.

5.1.3. Analyse des données et élaboration des indicateurs
Partant de l’analyse des données, les indicateurs socio-économiques suivants, ont été retenus dans l’optique où l’on envisagerait une évaluation avec de groupes témoins (dont liste en annexe) :

- Taille du ménage et degré de dépendance;
- Scolarité ;
- Soins médicaux ;
- Alimentation ;
- Cadre de vie (bien matériel : radio, frigo, maison …) ;
- Habitat (locataire ou propriétaire,) ;
- Approvisionnement en eau, électricité ;
- Emplois ;

Ces indicateurs ont été enrichis grâce aux entretiens structurés et exhaustifs menés par l’URK lors de la mise en paie des indemnités forfaitaires des partants volontaires et ont permis de ressortir leurs caractéristiques. Ces indicateurs ont été d’un apport important dans le cadre du projet de réinsertion des partants volontaires de la Gécamines :

- Profils ;
- types de projet envisagé par le partant ;
- domaine d’activité à exploiter (par exemple : l’agriculture, …) ;
- filières à explorer (par exemple la culture maraîchère,…) ;
- niveau de motivation face à la réinsertion ;
- niveau d’endettement ;
- logement …

Méthodologie de la deuxième étude sur l’analyse des impacts de la restructuration de la Gécamines

La méthodologie a consisté en

1. la récolte des données qualitatives à l’aide de trois techniques suivantes :
  ① entretiens avec des groupes focaux:
  - Partants volontaires Gécamines ;
  - Restants de la Gécamines ;
  - Veuve des partants volontaires ;
  - Pensionnés de la Gécamines ;
  - Femmes des partants volontaires ;
  - Représentants du comité des parents ;

86 Le focus-groupe comprenait 10 à 15 personnes prisent dans leur différence.
- Mineurs partants volontaires ;
- Représentants de la SNEL et de REGIDESO ;
- Délégués de la FAO, Pact-Congo, UNICEF, OMS, Vision Mondiale ;
- Responsables politico-administratif, éducatif et sanitaire ;
- employeur Gécamines (Directeur des Ressources Humaines, Directeur des Programmes Socio-Médicaux, Directeur de Départements de l’Enseignement Général et Technique)

entretiens individuels ;
consultations participatives avec diverses parties prenantes ;

2. l’analyse des données par l’approche AIPS (Analyse de l’Impact sur la Pauvreté et le Social)
3. La réalisation du cadre logique des stratégies d’atténuation des risques et des impacts négatifs

5.2.1. Approche AIPS

L’AIPS est une analyse de l’impact des interventions sur la distribution et le bien-être de différents groupes, en particulier sur le bien-être des pauvres et vulnérables. Cette méthode procède des focus-groups, des entretiens individuels par les focus-groups en vue de :

1. faciliter le débat public partant d’un ensemble de question :
   • qu’est-ce qui est analysé (impact de quoi ?)
   • quelle est la mesure de bien-être analysée ? (impact sur quoi)
   • sur quels groupes l’analyse porte-t-elle ? (impact sur qui ?)
   • comment les impacts sont-ils canalisés ? (impact comment ?)
   • comment les institutions affectent-elles les résultats ? (impacts comment ?)
   • quand les impacts se matérialisent-ils ? (impact quand)
   • quels sont les risques de résultats inattendus ? (impact si)

2. définir les indicateurs liés aux objectifs explicites de suivi de la réforme ;
3. examiner comment modifier la réforme pour aboutir aux objectifs ;
4. trouver des alternatives plus réalisistes partant des risques possibles ou réels retenus.

L’impact sur la pauvreté et le social (AIPS) inclut une analyse :
- ex-ante des impacts probables de reformes spécifiques, une analyse pendant la mise en œuvre de la réforme et
- une analyse ex-post des reformes réalisées

Dix éléments composent cette analyse notamment :
1. Choisir les réformes et poser les bonnes questions ;
2. identifier les parties prenantes ;
3. comprendre les mécanismes/canaux de transmission ;
4. analyser les institutions ;
5. rassembler les données et informations ;
6. analyser les impacts ;
7. améliorer la réforme et envisager des mécanismes de compensation ;
8. évaluer les risques ;
9. suivre et évaluer les impacts ;
10. favoriser un débat public et informer le choix de politique.

5.2.2 Méthode de cadre logique :
La méthode de cadre logique comporte deux techniques :
- La construction de l’arbre à problèmes ;
- La mise sur pied des objectifs, des stratégies de préventions, d’atténuation des risques et impacts négatifs.

6. Difficultés rencontrées
L’enquête menée sur les agents Gécamines et hors Gécamines dans les sites Lubumbashi, Likasi, Kolwezi de la province du Katanga a connu quelques difficultés dans son déroulement :
- Les données de la Gécamines ne sont pas à jour, surtout en ce qui concerne les agents : les affectations actuelles des agents ne sont pas enregistrées au service informatique ; les nouvelles adresses ne sont plus connues et par conséquent les enquêteurs ont eu des difficultés pour identifier les enquêtés ou pour les retrouver soit aux lieux du travail, soit à leurs domiciles ;
- Ceux qui étaient repérés, soit qu’ils n’étaient pas présents au rendez-vous pour des raisons de survie quotidienne, soit qu’ils étaient en congé, malades ou morts ;
- Incohérences et irrégularités des données récoltées et disponibilité difficile des données ;
- Manque et méfiance de certains chefs de ménage à recevoir les enquêteurs ; ces premiers ont été remplacés ;
- Absence de recensement depuis 1984, ceci pose des problèmes dans le dessin des enquêtes qualitatives ;
- Absence de recensement de la population hors Gécamines.

2.1. Présentation du guide d’entretiens
Le guide d’entretiens ci-dessous a été élaboré sur base de l’inventaire des parties prenantes au programme des partants volontaires de la Gécamines et à la lumière de l’annexe à des termes de référence et étendue des services.

Il a été constitué dans le but d’aider l’enquêteur à bien mener son enquête qualitative sur terrain. Il reprend donc les questions fondamentales autour desquelles tourneront les questions secondaires en vue d’avoir le plus d’informations recherchées. C’est pourquoi, il est important de savoir que l’entretien vise à approfondir l’étude de base socio-économique sur les conditions des ménages Gécamines et hors Gécamines menée précédemment sur les sites de Lubumbashi, Likasi et Kolwezi. Il vise aussi à dégager clairement les indicateurs nécessaires, à analyser les impacts sociaux en vue de la restauration des services sociaux et de la réinsertion des partants volontaires.
L’enquêteur pourra donc mettre un accent particulier sur le secteur éducatif et médico-sanitaire ainsi que sur les services sociaux fournis par la Gécamines aux partants volontaires et à l'ensemble de la population. Il s'avère indispensable d'identifier les groupes cibles (localités et groupes) le plus désavantage et vulnérable ainsi que les risques sociaux qui existent ou qui peuvent subvenir.

2.2. Protocole d'entretiens

2.2.1. Identification

- Nom (de l'organisme, de l'association, …)
- Situation géographique
- Raison sociale (occupation)

2.2.2. Entretien

ONGS, Copératives, syndicats, églises, banques, ACCO

1. Existe-t-il des partants volontaires dans votre organisme, association ?
   a) Si non : - pourquoi ne sont-ils pas avec vous ?
      Que comptez-vous entreprendre pour les attirer vers vous et/ou les encadrer ?
   b) Si oui : - combien sont-ils sur quel total (effectif) ? (par catégorie : manœuvre, cadre) ; quelles sont les activités entreprises par votre organisme, association … jusque là et pourquoi ? – quelles sont les dimensions (tailles, importance, intérêts, …) de ces activités ?

2. Comment comptez-vous planifier et faire progresser cette (ces) activité (s) ?
3. Quels problèmes avez-vous déjà rencontrés depuis l’arrivée des partants volontaires ?
4. Quels sont les résultats aux quels vous vous attendez ?
5. Quelles sont vos craintes et comment comptez-vous les éliminer ?
6. a) les partants volontaires faisant partie de votre communauté expriment-ils un désespoir ou en espoir quant à leur situation ? (questions surtout pour les responsables des églises et autres partenaires)
   b) comment soutenez-vous les désespérés (questions pour les responsables des églises et autres partenaires)
7. a) y a-t-il encore d’autres revendications (réclamations) en rapport avec le programme des partants volontaires ? (syndicats et partants volontaires, URK, INSS)
   b) Si oui, les quelles, pourquoi et d’où viendraient-elles ?

* EDUCATION87

87 Les questions (12) et (14) sont relatives à l’éducation et à la santé.
8. Y-a-t-il des écoles et classes fermées et pourquoi ? responsables d'éducation, autorités scolaires, coordinateurs, responsables des écoles privées, écoles Gécamines, associations des parents, Directeurs, Instituts supérieurs et extensions UNILU)

9. Les enfants des partants volontaires sont-ils dans vos écoles ?
10. Payent-ils facilement :
   a) le minérval ? combien ?
   b) le FIP ? combien ?


12. Quels sont les problèmes qui se posent actuellement dans votre secteur ? (sanitaires, scolaire)


14. Quel (s) acteur (s) de la privatisation ou du partenariat pensez-vous qui puisse (ent) bien gérer efficacement le système ?

15. Comment, en tant que professionnels du secteur, comptez-vous vous organiser pour faire fonctionner le secteur qui est le vôtre, si l'on vous le confiait pour la gestion (responsables et partants volontaires).

16. En attendant la mise en place du système éducatif ou sanitaire nouveau, quelles sont les mesures conservatoires et transitoires que vous envisagez pour garantir un transfert efficient des services ? (responsables des associations et partants volontaires).

* SANTE

17. 
   a) y a-t-il des formations médico-sanitaires et services de la Gécamines fermés (es) ou réouvertes (es) ? pourquoi,
   b) y a-t-il une autre alternative ?

18. Les partants volontaires ainsi que leurs familles fréquentent-ils encore les formations médico-sanitaires et services de la Gécamines et pourquoi ?


* SERVICES SOCIAUX (responsables)

20. Y a-t-il de nouvelles demandes d'abonnement ou de raccordement ?

21. Est-ce que vous facturez l'eau, l'électricité distribuée aux partants volontaires de la Gécamines ?
   a) si non, pourquoi ?
   b) quand projetez-vous le faire ?
c) connaître la situation actuelle, spécifiquement pour Kolwezi où les sites pour lesquels la Gécamines fournissait de l’eau et l’électricité.

22. Quelle (s) activité(s) exercez-vous ?
   a) où sont-elle (s) ?
   b) est (sont) -elle (s) collective (s) [(associative (s)] ou individuelle (s) ?
   c) si elle (s) est (sont) individuelle (s), pourquoi ?
   d) si elle est (sont) collective (s) pourquoi ?

23. Si oui, payez-vous l’impôt et/ou d’autres taxes lié (s) à ces activités ? (patente …)

24.  
   a) quelles sont les difficultés que vous rencontrez dans votre (vos) activité (s) ?
   b) comment comptez-vous les résoudre ?

25. Quelles formations médico-sanitaires fréquentez-vous et pourquoi ?

26. Recevez-vous des factures SNEL et REGIDESO ?
   a) si oui, vous acquittez-vous normalement et régulièrement des ces factures ?
   b) si non, au cas où elles vous serez déposées, vous acquitteriez-vous de ces factures ?


28. Avez-vous encore des enfants à l’âge de scolarité et où (devoir intégrer les questions liées à la désorganisation familiale : divorcé, enfants de la rue, …

29. Avez vous vécu des pressions familiales ? si oui, comment avez vous résolu cette situation ?

30.  
   a) avez vous été victimes d’actes d’escroquerie, d’endettement à usure ? comment vous y êtes-vous pris pour recouvrir vos droits ?
   b) êtes-vous en sécurité maintenant ?

HABITAT

31. Etes vous propriétaire, locataire de la maison que vous occupez ?

32. Quels sont les biens acquis (perdus) après l’opération départs volontaires ?

33. Que ressentez-vous après cette opération des départs volontaires ?

AUTORITÉS POLITICO-ADMINISTRATIVE, POLICE, GARDE INDUSTRIELLE, ACCO, PARQUETS

34. Y a-t-il recrudescence de la délinquance depuis l’opération du programme des départs volontaires ? (vols, escroquerie, délinquance, …).

35. Que pensez-vous de l’avenir de la Gécamines et de ses services sociaux ?

INDICATEURS SANITAIRES
- Taux de morbidité
- Taux de mortalité
- Taux d’utilisation des services
- Taux d’occupation des lits
Annex: 2: World Cobalt Market

Mine Production 2003

World Cobalt Reserves

Uses of Cobalt, 2003
Cobalt Development Institute

- Superalloy
- Hardfacing & Other Alloy
- Magnets All Types
- Hard Materials - Carbides, Diamond Tooling
- Catalysts
- Colors - Glass, Enamels, Plastics, Ceramics, artists colors, Fabrics
- Feestuffs, anodizing, recording, electrolysis, Cu Electrowinning
- Batteries
- Tyre Adhesives, Soaps, driers (paint/ink)
Annex 3: Gecamines Education Key Indicators

Nombre d'étudiantes par école GCM et nombre d'écoles dans un radius de 15 km

<table>
<thead>
<tr>
<th>Nombre d'écoles accessible (15 km) a cette école</th>
<th>15 autres écoles ou plus</th>
<th>5 a 15 autres écoles</th>
<th>2 a 4 autres écoles</th>
<th>1 autre école</th>
<th>Zero</th>
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<td>10712</td>
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<tr>
<td>Kolwezi</td>
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<td>5810</td>
<td>7686</td>
<td>1316</td>
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Pourcentage des étudiantes

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<th>15 autres écoles ou plus</th>
<th>5 a 15 autres écoles</th>
<th>2 a 4 autres écoles</th>
<th>1 autre école</th>
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<tr>
<td><strong>Secondaire</strong></td>
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<td></td>
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<tr>
<td>Lubumbashi</td>
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<tr>
<td>Total</td>
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<tr>
<td></td>
<td>Écoles</td>
<td>Enfants de Partant Volontaires</td>
<td>Total</td>
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<td>Lubumbashi &amp; Kipushi (Southern Mining Basin)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
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<tr>
<td>Likasi, Kambove, Mangombo (Central Mining Basin)</td>
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<tr>
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### 2003/2004

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<td>% Des Inscrits</td>
<td>Ecoles</td>
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<th>Likasi</th>
<th>Kolwezi</th>
</tr>
</thead>
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<td>Total Inscrits</td>
<td>% Des Inscrits</td>
<td>Ecoles</td>
<td>Total Inscrits</td>
</tr>
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<td>GCM (secondaires, techniques)</td>
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<td>GCM/Total</td>
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<td>11%</td>
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</table>

<table>
<thead>
<tr>
<th>GCM C, Promotion Familiale</th>
<th>Total</th>
<th>Lubumbashi</th>
<th>Likasi</th>
<th>Kolwezi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecoles</td>
<td>Total Inscrits</td>
<td>% Des Inscrits</td>
<td>Ecoles</td>
<td>Total Inscrits</td>
</tr>
<tr>
<td>Promotion Familiale</td>
<td>22</td>
<td>3,386</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>11%</td>
<td>22%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>
ENC  Non-conventionnée = de l’état
ECC  Conventionnée catholique
ECP  Conventionnée protestant
ECK  Conventionnée Kimbangiste
EPA  Prive agree
C- Recommendations:

1- Apply GECAMINES’ restructuring measures proposed by the Audit committee carried out for the company by separating management of the mining activities from the social services.

2- Learn lessons from the implementation of GECAMINES’ “Partants volontaires” reintegration program, in order to bring necessary corrective measures for the effectiveness in future actions.

3- Accelerate the expansion of the regional development plan of KATANGA, aligned with economic diversification of the Province and the Promotion of the entrepreneurship in the mining field.

4- Support the agricultural development of Katanga by applying the regional agricultural conference recommendations as follows:
   a. Opening-up rural center such as Kowezi, Likasi, Kipushi …
   b. Rehabilitation of agricultural supports.
   c. Discount on agricultural productivity, provide technical assistance to farmers and eliminate all administrative and police frustration.

5- Integration in government resources through basic social services of the GECAMINE such as education and health in order to gain access to government and donors financing. It will be up to the government to negotiate with interested parties, the future management of those services after a profound study of the sectors by COPIREP, keeping in mind the transitional period, to avoid sudden halt of government assistance in case of lack of sufficient resources.

6- Integration in the various programs of the government, supported by the external partners, of the priority needs for recoveries of the social sectors of the GECAMINE mainly in the PMURR, PUSPRESS, PMPTR, PUACV, PRESEC and DSRP.

7- To explore the possibilities of setting up specific measures for the most vulnerable cities and groups in the reorganization process of the GECAMINES.

8- To create social funds of reintegration for the “partants volontaires” and the implementation of participative approach associated with the reintegration.
9- The creation of structures that could assist in employment search and creation of micro-companies in the Province.

10- Setting-up new systems for participative management of water and electricity in the GECAMINES cities.

11- Allow a period of transition for GECAMINES to provide social services, while waiting for the government or the companies concerned (Water and Electricity) to restart effectively.

12- The need of new mining companies to comply with the provisions of the Mining Code in the establishment of their contribution to the social services.

13- Incorporate in the education sector, study questions related to Sport, Recreation and Social centers.

14- Need for the government to urgently treat the cases of new mining companies located in Katanga and the need for these companies to create long-term job, and respect the social legislation concerning employees.

15- Inclusion in the DSRP of Katanga province, the workshop recommendations.

16- Establish a follow-up committee to implement the adopted measures that will run in a chronogram. This committee will be composed of all the future stakeholders in the GECAMINES social services in the national level as well as provincial level.
CONCEPT NOTE SUR L’ATELIER DE KINSHASA
SUR
L’ANALYSE DE L’IMPACT SUR LA PAUVRETE ET LE SOCIAL DE LA RESTUCTURATION DE LA GECAMINES

1. Introduction

La province de Katanga a connu une transformation socio-économique profonde à la suite de la faillite de la Gécamines qui a été pendant plus de 30 ans le moteur de l’économie régionale et même nationale.

Les chiffres suivants ressortent la dégradation dramatique de la situation de la Gécamines :

- La productivité par agent est passée de 14,4 tonnes par agent en 1990 à 0,8 tonne par agent en 2002 et 0,7 tonne par agent en 2003.

Alors que la petite exploitation minière a compensé en partie ce déclin, les services sociaux quant à eux n’ont tiré aucun bénéfice. Le Katanga qui avait été la province la plus riche du pays se retrouve avec des indicateurs sociaux qui montrent une forte dégradation de la situation socio-économique. La malnutrition s’est aggravée dans le bassin minier au cours de ces dernières années suite à la baisse drastique de la principale source de revenus qui est le secteur minier.

Malgré la chute radicale de sa production, la Gécamines a continué pendant plusieurs années à maintenir le même niveau d’engagement à l’égard de son Personnel en matière de services sociaux provoquant un endettement colossal pour l’entreprise, la rendant incapable de remplir ses obligations vis-à-vis de ses employés, notamment les salaires et les soins médicaux. Au cours de dernières années, la Gécamines n’a pas été en mesure de mobiliser les ressources nécessaires au fonctionnement de ses services sociaux les mettant dans l’incapacité de répondre aux attentes des agents et de leurs familles mais aussi d’une grande partie des populations du bassin minier. Ces services sociaux, en particulier les écoles voient la qualité de leurs prestations se dégrader sans pouvoir bénéficier des appuis des programmes gouvernementaux ni de ceux des bailleurs de fonds car considérées comme écoles privées alors qu’elles ne sont plus soutenues par la Gécamines.

Afin d’atténuer les effets négatifs de cette situation, le Gouvernement de la RDC, a adopté un projet de compétitivité et développement du secteur privé PCDSP qui comporte trois volets à savoir :

- Réforme des entreprises
- Assainissement du climat des investissements
Appui aux initiatives économiques de la Province du Katanga

Dans le cadre de la mise en œuvre de ce projet, le Gouvernement a pris des mesures de réduction des effectifs du personnel de la Gécamines dites Opération Départs Volontaires qui a concerné 10.654 agents ayant accomplis au moins 25 ans de services.

Ce programme ne représente toutefois qu’un aspect de la vaste transformation du rôle que Gécamines jouait dans la province du Katanga. Étant donné l’ampleur de l’effort requis pour conduire un processus de diversification de l’économie aussi complexe avec différents acteurs régionaux, COPIREP et Gécamines ont besoin du soutien et de la collaboration des Ministères Sectoriels et autres parties prenantes (ONG’s et Bailleurs de fonds).

Pour une meilleure visibilité de ce processus, le Gouvernement a chargé l’Université de Lubumbashi (Unilu) de mener des études sous la supervision du COPIREP afin de : (i) évaluer les conditions socio-économiques des ménages sous influence de la Gécamines, et (ii) analyser l’impact de la restructuration de la Gécamines sur la pauvreté et le social (AIPS) dans le bassin minier de Katanga.

L’objectif de cette dernière étude est de rechercher les voies et moyens de réduire les impacts sociaux négatifs qui pourraient découler de la restructuration de la Gécamines, proposer les stratégies afin d’assurer la réussite de la réinsertion socio-économique des partants volontaires et tirer des leçons pour des programmes similaires à venir.

2. Objectifs de l’Atelier

L’objectif général de l’Atelier est de restituer les résultats de l’étude réalisée par l’Université de Lubumbashi sur l’Analyse de l’Impact sur la Pauvreté et le Social (AIPS) de la restructuration de la Gécamines.

Les objectifs spécifiques de l’Atelier :

(i) Sensibiliser et conscientiser les décideurs politiques, les bailleurs de fonds et autres parties prenantes sur la transformation socio-économiques que connaît la province de Katanga à la suite de la faillite de la Gécamines.

(ii) Informer les décideurs politiques, les bailleurs de fonds et autres parties prenantes sur les processus de réinsertion socio-économique des partants volontaires de la Gécamines, notamment sur la situation avant, pendant et après le paiement des indemnités des départs volontaires, les obstacles, les risques, les opportunités et les défis.

(iii) Discuter de l’avenir des services sociaux de la Gécamines, notamment des secteurs Santé et Education et réfléchir sur les options à lever en vue de l’élaboration d’une stratégie de gestion future de ces services. Deux études approfondies sur ces secteurs sont en cours de lancement par le COPIREP.
(iv) Mettre en relation les recommandations de l’AIPS avec le Document de Stratégie de
la Réduction de la Pauvreté (DSRP)

3. Les Participants à l’Atelier
Les participants au nombre d’environ 60 proviendront des différents institutions et
organisations concernées par les objectifs de l’Atelier, à savoir :

(i) Gouvernement (10):
• Ministère du Plan
• Ministère des Finances
• Ministère des Mines
• Ministère de l’Énergie
• Ministère de l’Education plus Division provinciale de l’Éducation
• Ministère de la Santé plus Inspection provinciale de Santé
• Ministère de l’Agriculture
• Gouvernorat de Katanga
• COPIREP

(ii) Bailleurs de Fonds (14) :
• Banque Mondiale
• BAD
• Union Européenne
• Coopération Belge
• Coopération Francaise
• USAID
• DFID (Grande Bretagne)
• ACDI (Canada)
• Coopération Allemande
• Coopération Japonaise
• Coopération Suédoise
• Coopération Chinoise
• BCECO

(iii) Agences des Nations Unies (8) :
• PNUD
• UNICEF
• BIT
• OMS
• UNESCO
• PAM
• FAO
MONUC

(iv) Société Civile (10):

- Eglise catholique
- Eglise protestante
- Intersyndicale de la Gécamines
- FEC
- COPEMEO / FOLECO
- PACT
- Comités des Parents d'élèves
- Représentants des partants volontaires (un des ouvriers, un de l’encadrement et un de la Direction)
- Ordre de Médecins du KATANGA

(v) Entreprises et Agences Publiques (5):

- GECAMINES: Dir. Mayaya, Dir.Bakasanda, Dir.Mukwenge
- SNEL: Dir. Réseau de Distribution National
- REGIDESO: Dir. Réseau National de Distribution
- INSS
- DSRP/Unité de Pilotage.

4. Programme de l’Atelier

L’Atelier est prévu pendant deux jours, les 15 et 16 juin à Kinshasa, et sera organisée en deux temps : La première journée avec les experts des institutions et organisations délégués par leurs responsables et la deuxième journée avec la participation des Ministres, Chefs des Missions de Coopération et les PDG des entreprises et des agences retenues.

La méthodologie de travail comprend :

1. Journée – 16 juin :
   Le matin :
   - Des exposés introductifs présentés par l’Université de Lubumbashi et le COPIREP
   L’après midi :
   - Travaux en groupe autour des principaux thèmes relatifs aux services sociaux :
     (i) Groupe de travail santé
     (ii) Groupe de travail éducation
     (iii) Groupe de travail énergie (eau et électricité)
     (iv) Groupe de travail sur la réinsertion socio-économique (agriculture, activités génératrices de revenus, petites et moyennes entreprises etc.)
Les groupes de travail vont aborder non seulement les problèmes spécifiques à chaque secteur concerné, mais aussi les aspects institutionnels et organisationnels.

2. journée – 17 juin :

Le matin :
- Des exposés des modérateurs de chaque groupe de travail sur les conclusions et les recommandations et à l'adoption du rapport des travaux des experts
L'après-midi :
- Présentation des rapports des experts aux décideurs politiques, aux chefs de missions de coopération (bailleurs de fonds), aux agences d'exécution et aux responsables des entreprises et autres parties prenantes.
- Discussions et échanges sur les rapports des experts
- Discussions et échanges sur les prochaines étapes
- Adoption du rapport de l'Atelier
- Clôture de l'Atelier

Une troisième journée (le 18 juin) est prévue pour les équipes de l'UNILU, COPIREP et les consultants pour évaluer les résultats de l'Atelier et tirer des leçons pour la suite du processus et pour rédiger le rapport final de l'Atelier.

5. Organisation et Animation des travaux de l'Atelier

L'équipe d'organisation et de modération sera composée de sept chercheurs de l'Unilu, appuyée par deux consultants et par le Copirep. La modération générale sera assurée par le consultant M. Simon Mboso. Le rôle du rapporteur général sera assurée par un chercheur de l'UNILU, il en sera de même de rapporteurs de chaque groupe de travail sauf le groupe ‘réinsertion’ dont URK sera le rapporteur. Les modérateurs de chaque groupe seront sélectionnés parmi les participants à l'atelier selon leur connaissance du secteur.

Proposition :
- Gr. : Santé : Secrétaire Général à la Santé
- Gr. : Education : Secrétaire Général à l'Education
- Gr : Energie : Directeur de Cabinet à l'Energie
- Gr. : Réinsertion : André Mushama, COPIREP

6. Contenu des exposés

Il est prévu quatre exposés :
(i) Un exposé introductif par le Secrétaire Exécutif du COPIREP qui définit le contexte et le cadre d’organisation de l’Atelier (10 minutes)
(ii) Un exposé du Recteur de l'Université de Lubumbashi sur la présentation de l'étude AIPS de la restructuration de la Gécamines (20 minutes)

(iii) Un exposé par le Coordinateur de l'équipe des chercheurs qui présente les constats, les résultats, les impacts et les conclusions et les stratégies de l'Etude (45 minutes)

(iv) Un exposé du Chef de l'Antenne COPIREP – URK sur le processus de réinsertion socio-économique des partants volontaires de la Gécamines (10 minutes)
7. **Déroulement des Travaux**

<table>
<thead>
<tr>
<th>Heures</th>
<th>Activités</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. journée -16 juin</strong></td>
<td></td>
</tr>
<tr>
<td>09.00 – 09.30</td>
<td>Enregistrement des participants</td>
</tr>
<tr>
<td>09.30 – 09.40</td>
<td>Mots de circonstance du Secrétaire Exécutif du COPIREP</td>
</tr>
<tr>
<td>09.40 – 10.00</td>
<td>Exposé général du Recteur de l'Université de Lubumbashi sur l'Etude AIPS de la restructuration de la Gécamines</td>
</tr>
<tr>
<td>10.00 – 10.45</td>
<td>Présentation détaillée de l'Etude (constats, résultats, impacts, conclusions et stratégies) par le Coordinateur de l'équipe des chercheurs avec compléments éventuels par les Professeurs Kalaba et M'bayo, membres de l'équipe</td>
</tr>
<tr>
<td>10.45 – 11.05</td>
<td>Exposé du Chef de l'Antenne COPIREP – URK sur le processus de la réinsersion socio-économique des partants volontaires de la Gécamines</td>
</tr>
<tr>
<td>11.05 – 11.20</td>
<td>Pause café</td>
</tr>
<tr>
<td>11.20 – 12.30</td>
<td>Débat général sur les exposés</td>
</tr>
<tr>
<td>12.30 – 14.00</td>
<td>Pause déjeuner</td>
</tr>
<tr>
<td>14.00 – 14.15</td>
<td>Constitution des groupes de travail</td>
</tr>
<tr>
<td>14.15 – 17.15</td>
<td>Travaux en groupe</td>
</tr>
<tr>
<td><strong>2. journée – 17 juin</strong></td>
<td></td>
</tr>
<tr>
<td>09.00 – 11.00</td>
<td>Restitution des travaux en groupes à plénière</td>
</tr>
<tr>
<td>11.00 – 12.00</td>
<td>Adoption du Rapport des travaux des experts</td>
</tr>
<tr>
<td>12.00 – 14.00</td>
<td>Pause déjeuner</td>
</tr>
<tr>
<td>14.00 – 14.15</td>
<td>Ouverture de la session avec des décideurs</td>
</tr>
<tr>
<td>14.15 – 15.15</td>
<td>Présentation et discussions du Rapport des travaux des experts (constats, impact et options)</td>
</tr>
<tr>
<td>15.15 – 16.15</td>
<td>Échanges sur les prochaines étapes</td>
</tr>
<tr>
<td>16.15 – 17.00</td>
<td>Adoption du Rapport Final de l’Atelier</td>
</tr>
<tr>
<td>17.00 – 17.30</td>
<td>Clôture de l'Atelier et Cocktail</td>
</tr>
</tbody>
</table>

8. **Produits attendus de l’Atelier**

(i) Les parties prenantes sont sensibilisées aux problèmes de la transformation socio-économiques de la province de Katanga en général et du bassin minier en particulier, suite à la faillite de la Gécamines

(ii) Les parties prenantes sont suffisamment informées du déroulement du processus de réinsertion socio-économiques des partants volontaires de la Gécamines

(iii) Les parties prenantes sont largement averties des questions liées à l’avenir des services sociaux actuellement gérés par la Gécamines
(iv) Des recommandations sont adoptées par les parties prenantes à l’issue de l’Atelier, notamment sur la nécessité de disposer une Stratégie de transition pour la gestion des services sociaux de la Gécamines.
(v) Un comité de suivi comprenant les Ministères Sectoriels, les Bailleurs de Fonds, les agences d’exécution et la Société Civile et autres parties prenantes est mis en place afin d’assurer l’évaluation périodique des recommandations de l’Atelier.
9. **Organisation Matérielle**

L’Atelier aura lieu au Grand Hôtel à Kinshasa qui dispose de capacité d’accueil et réunit des conditions logistiques pour le bon déroulement des travaux et l’organisation de la restauration et des pauses café et du cocktail pour l’Ouverture et la Clôture de l’Atelier.
Annex 5: Partants and Existing Assistance for Reinsertion Activities in Agriculture

For partants volontaires, the most likely sources of assistance in agriculture are URK/COPIREP, FAO and PACT, which all provide agricultural extension programs open to partants. However, the human and financial resources are limited to assisting a fraction of the total partants volontaires. URK had two agronomists on its staff to provide training and assistance to the more than 10,000 partants. URK has worked in collaboration with AASF (Association des Agricultures sans Frontière). It appears to be mostly higher level staff (cadres), those with existing entrepreneurial skills who are able to take advantage of URK’s assistance in this area. FAO and PACT have programs that help farmers with technical assistance. Partants are able to join, but often not aware of their existence.

Table 1: Sources of Agricultural Advice to Partants as of 2004

<table>
<thead>
<tr>
<th>Organization</th>
<th>Human Resources</th>
<th>Partants volontaires currently being assisted</th>
<th>Number of partants that could potentially assisted</th>
</tr>
</thead>
<tbody>
<tr>
<td>URK</td>
<td>2 agronomists</td>
<td>Open to all but about 600 ~600 currently using</td>
<td></td>
</tr>
<tr>
<td>PACT</td>
<td>1 agronomist</td>
<td>Programs in place for 340 Up to 1,500 - 540</td>
<td></td>
</tr>
<tr>
<td>FAO</td>
<td>1 agronomist, 40 several dozen trainers</td>
<td>up to 800</td>
<td></td>
</tr>
</tbody>
</table>

PACT helps a number of at risk families in areas related to agricultural production, with the goal of helping farmers choose crops which can be sold on the market. The MALI (Market Approaches to Livelihood Improvement) program, financed by USAID, has three components which complement each other: agriculture, small and micro-enterprises and micro-finance. Instead of simply providing technical assistance in raising crops, PACT is conducting market research to determine the price of goods and the volume traded. (See “Report on the Market Price Data Collection for PACT.” March 2004). PACT is currently creating a market value chain which assesses the costs and impediments at every stage of production from planting to sales. PACT believes that agricultural production in Katanga is a viable commercial activity and that many imported food stuffs could be produced and sold on local markets. Partants, who have been invited for open discussions regarding their work so far and their needs. This program currently involves three thousand households and a limited number of partants. PACT can offer this program to only a fraction of partants households. Resources are limited and even support for a several hundred partants would require additional funding.

HUP/FAO (Horticulture Urbaine – Peri-urbaine/Food and Agriculture Organization) has an agricultural extension program with the objective of helping farmers in horticulture sector become commercially viable, raising agricultural capacity and increasing food security. The program is open to all but few partants thus far have taken advantage of it. Partly this is because it is currently only operating in Lubumbashi, partly
because awareness does not seem to be high among partants. Partants have generally less experience than other farmers and require more basic technical assistance. Although partants have higher education, this may actually inhibit them in learning new skills. FAO requires that those it helps form an association. One such association, Copaco, imports inputs, at the same price as commercial importers, and sells it to its members at cost, significantly lower than the market price.

Cooperatives. Despite the challenges facing partants volontaires in developing agriculture activities as an income source, there are several examples of successful endeavors in this area. In Kolwezi, there are at least eight cooperatives made up of primarily partants. A total of 486 out of 3,319 (or 14.6 percent) of partants in Kolwezi therefore belong to a cooperative. Most cooperatives are small-scale. Tusaidiane is in fact an association of many small cooperatives.

Table 2: Cooperative Membership Among Partants in Kolwezi, 2004

<table>
<thead>
<tr>
<th>Cooperative</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masikilizano</td>
<td>20</td>
</tr>
<tr>
<td>Maisha</td>
<td>14</td>
</tr>
<tr>
<td>Capko</td>
<td>27</td>
</tr>
<tr>
<td>Amko</td>
<td>100 (of which 89 PVs)</td>
</tr>
<tr>
<td>Codeki</td>
<td>7</td>
</tr>
<tr>
<td>Foi bahai</td>
<td>6</td>
</tr>
<tr>
<td>Lifk</td>
<td>11</td>
</tr>
<tr>
<td>Tusaidiane</td>
<td>500 (of which 321 PVs)</td>
</tr>
</tbody>
</table>

Source: University of Lubumbashi

AMKO is an example of a thus far successful cooperative. Founded well before the Operation des Departs Volontaires, it is made up of 91 members (of which 89 are partants volontaires) in addition to several who are hired as specialists. The cooperative’s seed money comes from an initial capital contribution of USD 1,500 from each member. It has purchased 1,000 ha outside Kolwezi, tractors and inputs from Zambia, and sawmill equipment. AMKO planted 25 hectares of maize, soybeans, carrots and other crops in its first year, will expand to 300 ha this year and eventually 1,000 ha. The produce is distributed among members to consume or sell. AMKO members, which all belong to the same church, began preparing the association three months before the ODV, at the initiative of an academic with NGO experience. They expect to become profitable within three years. AMKO has diversified into other activities also: it has a pharmacy, and a social outreach program to help vulnerable women and children from the area. Members contribute labor and receive a small stipend in return but eventually are expected to earn a living wage (i.e. larger returns on their shares in the cooperative).

Problems with access to fertilizer in a timely manner and at competitive prices hinders the revenues from agriculture. Also, for those who are desperate for cash income, they often have to sell at the season with the lowest prices. The following tables show a
typical scenario based upon data from the URK agronomist, and they illustrate the constraints. The case is for corn or “mais”.

Table 3: Income from cultivation of 1 ha *mais*

<table>
<thead>
<tr>
<th>Technique/Input</th>
<th>Yield Per Ha (tons mais)</th>
<th>Market Price</th>
<th>May to Aug</th>
<th>Sept-Oct</th>
<th>Nov-Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractor, fertilizer</td>
<td>5</td>
<td>$150</td>
<td>$750</td>
<td>$1,250</td>
<td>$1,350</td>
</tr>
<tr>
<td>Tractor, no fertilizer</td>
<td>3</td>
<td>$150</td>
<td>$750</td>
<td>$810</td>
<td></td>
</tr>
<tr>
<td>By hand, no fertilizer</td>
<td>1.5</td>
<td>$225</td>
<td>$375</td>
<td>$405</td>
<td></td>
</tr>
</tbody>
</table>

1/Estimated of cost per ha with tractor but no fertilizer

Table 4: Profit/Loss per ha mais

<table>
<thead>
<tr>
<th>Cost per ha</th>
<th>Profit/Loss per ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>May to Aug</td>
<td>Sept-Oct</td>
</tr>
<tr>
<td>$600</td>
<td>$150</td>
</tr>
<tr>
<td>$480</td>
<td>-$30</td>
</tr>
<tr>
<td>$450</td>
<td>-$225</td>
</tr>
</tbody>
</table>