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<th>Business and Economic History of Copper Industry in the Democratic Republic of Congo</th>
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Introduction
The Democratic Republic of Congo as resource-rich developing country suffers from a phenomenon termed the resource curse. Paradoxically, wealth in the form of natural resources appears to be detrimental to the economic development of the country. The mining sector has constituted the cornerstone of Congolese’s wealth since colonial times. The country on average has lower growth rates, lower levels of human development, and more inequality and poverty. The current scenario of production shows high risk to compromise sustainable development for future generations. The copper ore reserves of DR Congo are estimated to last for about half a century. Sustainable management of natural resources is essential to assure the socio-economic development. Historical analysis of primary and secondary sources identifies bad institutions and corruption as the main reasons why the country performs badly in economic terms. There is a risk to maintain people in poverty up to depletion of resources.

Objectives
The purposes of the research are:
1. To assess the contribution of copper industry to economic growth.
2. To explain the turning points of copper industry.
3. To understand the impact of mineral resource mining on environment at local and global levels.

Study Area
This research is conducted on the south-eastern part of Katanga Province, in the Democratic Republic of Congo. This area long of 300 kilometers contains in excess of 10% of the world’s known copper resources and about 34% of global cobalt deposits which are exploited by Gecamines and Sodimico in DR Congo. It is called the Central African Copper belt.

Materials and methods
We use interviews conducted in March 2010 and February 2011 with managers of Sodimico and Gecamines. The Annual Reports of these two companies and Archives are primary sources collected for this study. We use qualitative methods to explain the impact of copper industry on economic growth and environment protection. The study integrates Interdisciplinary Approach including History, Econometrics, Politics, and Business.

Production of Copper
The output of Congolese copper industry is depicted in the following graphs. The graph 1 depicts the first phase of output of Union Minière du Haut Katanga nationalized in 1967 and renamed as Gecamines. The second phase of output is shown in graph 2.

Consumption of copper
The quantity of metals consumed determines the stage of economic development of the country. DR Congo consumes less than 10 percent of its output as depicted in graph 5 below.

Analysis and Results
The contribution of copper industry to GDP and the evolution of Per capita GDP are depicted in the following graphs.

Economic Analysis of copper industry:
- Production oriented to exportation...
- Unexploited demand from local and African markets
- Supply of raw material instead of adding value by further processing of copper
- Price fluctuation changes the shape of demand and supply curves
- Need of new investment in research, technology and further refining
- Economic wars of resources in region

Political factors:
- Bad institutions lead to corruption and plundering of mineral resources.
- Colonial legacy of the country
- Lack of internal pressures on officials
- Total dependency on foreign investments from multinational companies
- Lack of patriotism to ensure that copper resources benefit all population.

Suggestions
The study has identified corruption and bad institutions with dependency on multinationals in copper industry as causes of bad performance. In order to change the trend, new policies that focus on clean deals should be implemented in DR Congo. In addition, clean practices such as fairness, win-win deals, transparency in production, consumption and mining contracts are required. All actors should emphasize clean deals that promote environmental protection to achieve sustainable development.

Conclusions
The copper industry in DR Congo has high potential capacity to contribute to economic growth. The interactions of economic, political and managerial factors had negative impacts on the industry for the last century of exploitation. The data of production, consumption and GDP give evidence that the past and current scenarios of management are not sustainable. In order change the trends:
- The Congolese government should stop the patterns of illicit exports and corruption, as well as interference of political and military officials in mining deals.
- The study suggest new concept of “clean deals” in minerals at every stage as solution to improve the management of mineral resources in order to achieve sustainable development.
- There is hope that copper industry can afford sustainable development with concerted efforts of public officials and local people by better use of natural resources.

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Graph 1: Map of Central Africa Copper Belt

Source: ICS Copper Systems

Graph 2: Total output of Gecamines (1967-2006)

Source: Author using data from Annual Reports of Gecamines 1967-1996 & Sodimico 1974-2010

Graph 7: Export of Copper

Source: London Metal Exchange

Figure 1: Export of Copper

Figure 2: Total production of Gecamines 1967-2006

Shares:
- Cobalt
- Copper

Figure 3: Copper output of copper and cobalt mines

Figure 4: Regional refined output of copper

Figure 5: Copper output of DR Congo

Figure 6: Copper consumption of DR Congo

Figure 8: Graph of DR Congo GDP growth rate per capita, 1984-1998

Graph 5: Graph of DR Congo GDP growth rate per capita, 1984-1998

Figure 9: Copper consumption of DR Congo

Figure 10: Economic Analysis of copper industry

Figure 11: Political factors

Figure 12: Suggestions

Figure 13: Conclusions