# The Bauxite Community Development Program: A Blueprint for Community Engagement and Sustainable Mining

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### Abstract



The bauxite mining industry in Jamaica has been a significant source of revenue for the country for decades, with large mining companies generating profits from the extraction of aluminium ore. Despite this, some surrounding communities have not benefited enough from these profits, though they experience the environmental and social impacts from mining operations. As a result, the relationship between the communities and the companies was often very acrimonious, a situation that has persisted for decades. To address these issues, the Bauxite Community Development Program (BCDP) was developed to reinvest a portion of the earnings from bauxite mining in Jamaica back into surrounding communities to fund sustainable agricultural projects for rural farmers, infrastructural development, training and capacity building and also to support small businesses. Another very important role of the BCDP was to bridge the divide between residents on one end and the bauxite companies on the other, thereby providing a space for dialogue, mediation and harmony between both. This paper will explain the framework under which the BCDP operates and the mechanisms utilized to bridge the gap between private mining companies and communities. The need for the BCDP is particularly poignant given Jamaica's unique situation where bauxite mining often takes place in very close proximity to residential spaces. In outlining the functioning, management and structure of the BCDP, several projects will be highlighted as successful case studies within the BCDP apparatus. These projects, mostly located in rural spaces, can be used as a blueprint (in part or in whole) for other jurisdictions to adopt, especially in light of the increased focus on sustainable development globally amid increased scrutiny of the mining industry. Overall, the BCDP therefore represents a promising step towards creating a more equitable and sustainable mining industry in Jamaica.

Keywords: Bauxite Community Development Programme (BCDP), Sustainable mining, Agriculture, Community projects.

#### 1. Introduction

The island of Jamaica, in the Caribbean Sea, is a formation primarily composed of limestone, with an approximate size of 10 000 km<sup>2</sup>. With a population of roughly 2.8 million as at 2018, the most recent year for which official data exist, its lifeline is intricately linked to a few industries, including tourism, agriculture and bauxite. Of the total population, almost 700 000 people reside in and around its capital Kingston and by extension St. Andrew. The remaining 2.1 million are scattered throughout the remaining 9 500 km<sup>2</sup> across 12 parishes [1] outside of Kingston and St. Andrew. The parishes with the highest population are: St. Catherine, Clarendon, Manchester, St. James, St. Elizabeth and St. Ann. Incidentally, these parishes contain almost all of Jamaica's bauxite deposits and five of the six parishes listed above have active mining or other bauxite-related activities. The bauxite mining activities in these parishes are almost exclusively concentrated in areas where the terrain is conducive to intensive mining activities; the rub is that these areas are also the spaces most conducive to settlement and residential uses. Bauxite mining in Jamaica has therefore always competed (for want of a better term) with other critical industries, chief among them being housing and agriculture, as no community can last without the means to

feed itself. The very discovery of the ore itself stemmed from the competition that characterizes its existence.

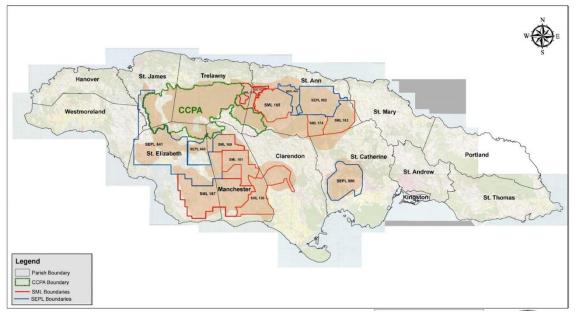


Figure 1. Location of mining activities in Jamaica.

# 1.1 History of Bauxite Mining in Jamaica

Bauxite in Jamaica has its beginnings in the Parish of St. Ann in a hamlet called Lydford where, in the 1930s, a farmer by the name of Alfred D'Costa was unsuccessfully trying to cultivate a special kind of grass called Wynne [2]. Annoyed at is failure, he asked the Department of Agriculture at the time to test the soil, wondering if there was any connection with the soils' deep red colour and his futile exercise. Chemist R. F. Innes would take on the task and by 1952, it was concluded that the soil contained bauxite in quantities that made it commercially viable. Over the next 7 decades, the country would invest tremendous resources into the bauxite industry. At a point in the 1950s, the verified global bauxite reserve estimate was close to 1.5 billion tonnes, of which Jamaica commanded a sizeable 20 % [2]. By the 1970s, bauxite had displaced sugar and banana as Jamaica's highest earner and, in 1972, it contributed to Jamaica's highest rate of economic growth, at just over 18 % [3].

These elysian times would not last, however, and the cracks began to appear as early as the 1990s as Jamaica's market share began to suffer from increased competition on the global market. The arrival of countries such as China, Indonesia and Guinea as competitors on the global market would push Jamaica to 7<sup>th</sup> in terms of total bauxite production [4] with a market share of just under 4 %.

These Elysian times were short lived and cracks began to appear a few decades after as Jamaica's market share began to suffer from increased competition on the global market particularly from Australia and Brazil. The effects of this was exacerbated by the imposition of the bauxite production levy in 1974 [4]. Though the industry still contributed the lion's share of Jamaica's GDP, the slippage on the global landscape was steady and constant. The arrival of countries such as China, Indonesia and Guinea as competitors on the global market would push Jamaica to 7<sup>th</sup> in terms of total bauxite production [5] with a market share of just under 4%.

blown from the now dry red mud/residue ponds into their homes. Though checks on the degree of the dust incident revealed it to be less than significant, on the ground assessments of the situation revealed that the agitation was largely fueled by the desire for monetary compensation as many families were beginning to feel the pinch from the rising food prices. In one particular community, an assessment revealed that there was a large number of chicken farmers who were negatively affected by the rising prices. As community members started to demand attention and many threatening protest the BCDP, understanding the force behind the agitation, utilized standing partnerships with other government stakeholders to quickly mobilize support for the poultry farmers in the area. Close to 100 poultry farmers were provided with chickens, chicken feed, training and other inputs through the BCDP. This largely satiated tempers and assisted in the resetting of normal relations between the community and the industry. To date, over half of the poultry farmers supported are still in business, using the revenue obtained from their original stock to replenish their operations, thereby reestablishing sustainable micro-agricultural enterprises within these communities.

Finally, impact requires focus. This is particularly true when distributing finite resources. The BCDP experience revealed that there is greater impact to be had by identifying limited areas of focus that represent the most intense pressure points within communities. This approach also lends itself to more effective strategic planning. Emerging from the Covid-19 pandemic, the BCDP adjusted focus to three sectors most impacted by the pandemic: community health, small business support and education. Though the program would have provided support in these areas in one way or another in the past, a larger percentage of the budget was set aside to address projects that fell within one of these three pressure points. As a result, over the last three (3) years the BCDP projects ranged from the renovation and reopening of community clinics to the provision of tablets and laptops to assist with distance/hybrid learning. This has resulted in a greater level of impact being felt by residents in bauxite communities.

## 5. Conclusion

The Brundtland Commission of 1987 described sustainability as the ability to

"meet the needs of the present without compromising the ability of future generations to meet their own needs." [12]

By reinvesting the earnings from the industry into the communities that support it, the BCDP has created a cycle of development that ensures the communities feel the benefits of the industry on the ground. The utilization of mined-out bauxite pits as water catchment ponds to support small farmers represents a best practice in sustainable mining. In Jamaica, the activities of the BCDP is also supported by government legislation. Since 2001 for example, the law requires that bauxite companies restore mined-out lands within 3 years after mining or face a fine. This helps to preserve the space needed for the BCDP to operate in collaboration with bauxite companies as lands are often reclaimed with the end use (agricultural, construction etc) having been agreed upon by all necessary stakeholders. In keeping with the Brundltand Commision's definition of sustainability, sustainable mining is indeed very achievable, the blueprint of which can be found in the operation and vision of the Bauxite Community Development Program.

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