



MINES & RAFFINERIES
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GAC

Project-Induced In-Migration Management Strategy and Conceptual Regional Development & Planning Strategy

GAC's Bauxite Export Project, Guinea

Emirates Global Aluminium

March 2017



**Project-Induced In-Migration
Management Strategy and Conceptual
Regional Development & Planning
Strategy**

GAC's Bauxite Export Project, Guinea

Emirates Global Aluminium

For and on behalf of
Environmental Resources Management

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Signed:



Position: Partner-in-Charge

Date: January 2017

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OVERVIEW AND EXECUTIVE SUMMARY

Glossary of Terms

AfDB	African Development Bank
ARMI	African Responsible Mining Initiative
ANAIM	Agence Nationale d'Aménagement des Infrastructures Minières (National Agency for the Management of Mining Infrastructure)
CBC	Code of Business Conduct
CBG	Compagnie des Bauxites de Guinée
CIS	Community Investment Strategy
DGS	Diversified Growth Strategy
DRC	Democratic Republic of Congo
DSMP	Discipline Specific Management Plan
ECOWAS	Economic Community of West African States
EGA	Emirates Global Aluminium
EHA	Environmental Health Areas
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GAC	Guinea Alumina Corporation
GDP	Gross Domestic Product
GIS	Geographic Information System
GNF	Guinean Franc
GoG	Government of Guinea
HIV/AIDS	Human Immunodeficiency Syndrome / Acquired Immunodeficiency Syndrome
HSSEC	Health, Safety, Environment & Community
HSSMP	Health, Safety and Security Management Plan
ICD	Investment Corporation of Dubai
ICMM	International Council on Mining and Metals
IFC	International Finance Corporation
IFC PS	International Finance Corporation's Performance Standards
IRD	Integrated Regional Development
LDA	Local Development Agreement
LDF	Local Development Fund
LDP	Local Development Plan
m	Metre
m ³	Cubic metre
MA	Mine Area
MME	Ministry of Mines and Energy

Mtpa	Million tonnes per annum
MVA	mega Volt Amps
MW	megawatt
NGO	Non-Governmental Organization
PAP	Project Affected People
PIIM	Project-Induced In-Migration
PIIMS	Project-Induced In-Migration Management Strategy
PS	IFC Performance Standard
RDP	Regional Development & Planning
SA	Site Assessment
SEIA	Social and Environmental Impact Assessment
SEP	Stakeholder Engagement Plan
SEMP	Social and Environmental Management Plan
SME	Small and Medium-sized Enterprise
SMI	Small and Medium-sized Industry
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UNDP	United Nations Development Program

OVERVIEW

Guinea Alumina Corporation (GAC) is a Guinean registered company owned by Emirates Global Aluminium (EGA), a joint venture between Mubadala, an investment and development company established by the Government of Abu Dhabi and the Investment Corporation of Dubai (ICD) established by the Government of Dubai. EGA acquired full ownership of GAC in June 2013.

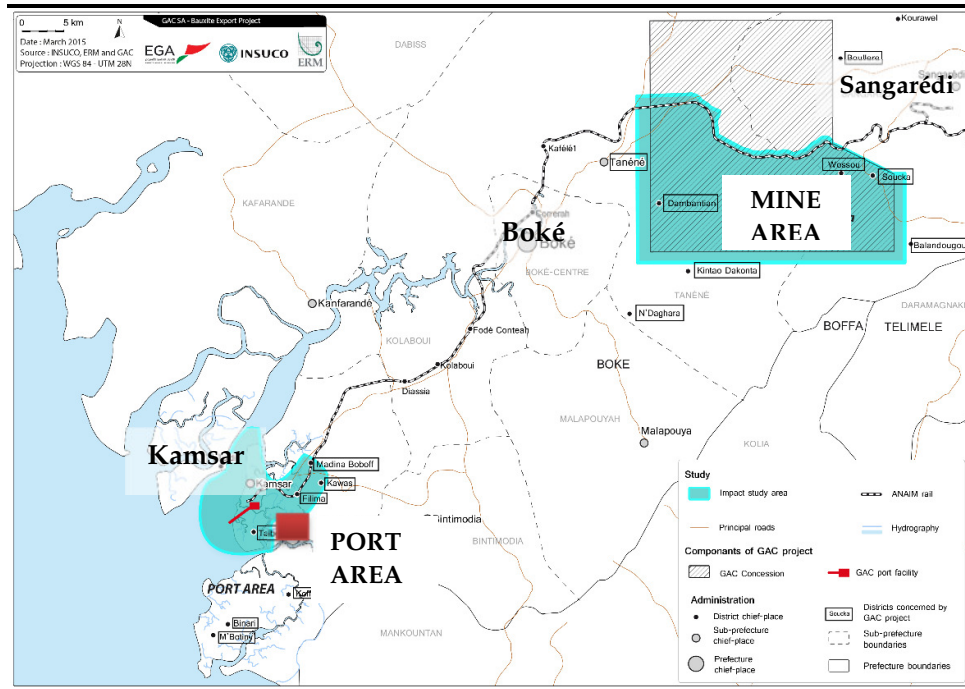
GAC is developing a bauxite mine (“the Project”) in the prefecture of Boké, sub-prefecture of Sangarédi and Tanéné, in northeast Guinea. GAC recognises that project-induced in-migration will be a source of impacts on habitats and biodiversity. Project-induced in-migration (also referred to as “in-migration” and “influx”) involves the rapid movement of people into an area in anticipation of, or in response to, economic opportunities associated with the development and/or operation of a new project. In April 2016, EGA commissioned ERM to prepare a project-induced in-migration management strategy (hereinafter ‘PIIMS’) to manage in-migration. The PIIMS is intended to be a comprehensive description of potential management approaches to discouraging and reducing in-migration, managing its footprint, enhancing its positive impacts, and mitigating its negative impacts.

This document is GAC’s PIIMS.

Project Components

The Project is a bauxite export development with a mine located in GAC’s concession in the Sangarédi and Tanéné sub-prefectures north-east of Boké, and a port for international shipment, located in Kamsar. Bauxite extracted from the mine will be carried to the port on the existing rail infrastructure linking Sangarédi to Kamsar, operated by CBG (the infrastructure is currently being expanded under a separate project).

Figure 0.1 Location of Mine Area and Port Area



The main Project components are therefore:

- operation of bauxite sampling activities on the southern Mine Area to be transported to the Port Area, commencing in mid- to late 2016; and
- construction and operation of mining activities on the southern Mine Area and transport to the Port Area, commencing in late 2016.

Figure 0.2 Mine Area Configuration

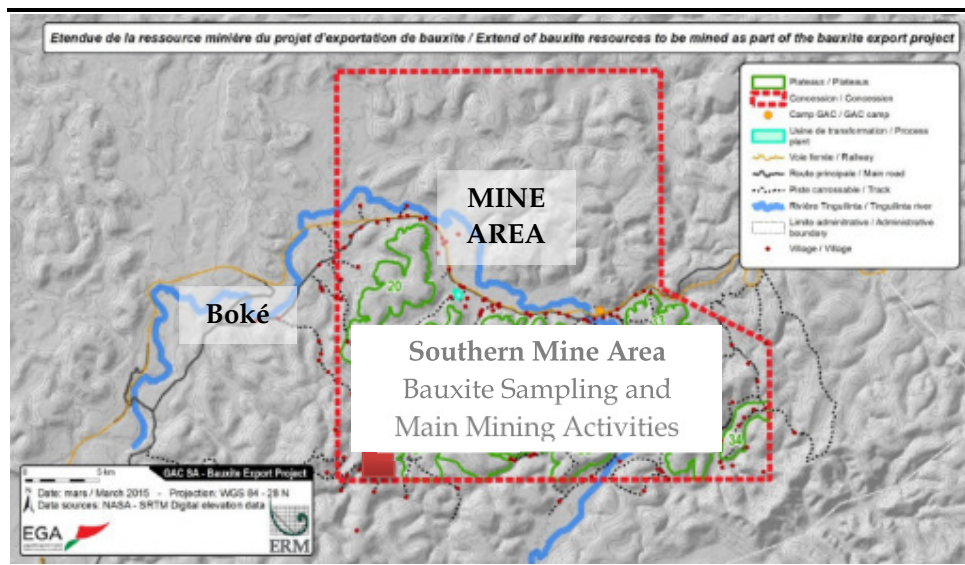
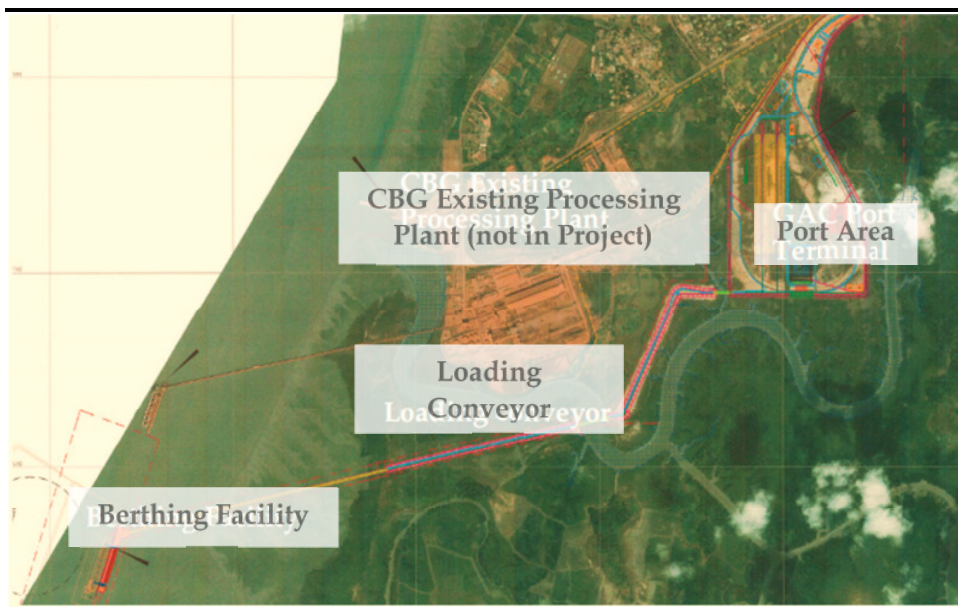


Figure 0.3 Port Area Configuration



See Section 2 for a detailed Project description.

The Definition of PIIM

IFC defines PIIM as the “movement of people into an area in anticipation of, or in response to, economic opportunities associated with the development and/or operation of a new project. For most projects, project development and operations will induce, and are sometimes dependent upon, the in-migration of labour. Beyond direct Project-related employment, there is also a wide range of project-related economic opportunities that serves to draw people into the project area”¹.

Benefits of PIIM

Research² shows that new mining projects in resource-rich emerging economies tend to catalyze, or be part of, a larger process of local and regional economic development. In-migration can be a positive part of this process and benefit the project and its host community by:

- increasing the availability of skilled workers;
- increasing the availability and accessibility to an improved variety of goods and services; and
- offering employment to local residents in the businesses that in-migrants establish to provide goods and services to the new projects.

¹ IFC Handbook for Addressing Project-Induced In-Migration, 2009.

² ICMM, Mining: Partnership for Development, 2011

Negative Impacts of PIIM

In-migration also causes negative impacts. In order to understand these, it is necessary to first understand the forces or factors that stimulate PIIM in Africa.

Africa's emergence as an attractive place to do business has attracted high levels of investment mainly into large mining, oil & gas, transport and infrastructure projects¹. While these projects are accelerating economic growth in the regions where they are being developed, they have negligible effect on adjacent ones, resulting in increasing levels of regional inequality and disparity. Regional inequality and disparity drives the movement of large numbers of people from lagging regions to economically progressive ones, even if these regions are across international boundaries. There are significant environmental and social risks when a large influx of migrants arrives in a region where there are low levels of infrastructure, essential services, government capacity and support for integrating arriving populations. One of the most common events is a sharp increase in unplanned urbanisation leading to adverse and negative environmental, social and health impacts on the 'host' communities, typically:

- rising tension, with potential for conflict between existing host populations and newcomers;
- increased rates of land utilisation, deforestation, degradation of habitats and biodiversity loss, overhunting and overfishing, and housing, food and water shortages;
- increased pressure on agricultural land;
- increased pressure on local healthcare facilities, schools, services, infrastructure, utilities and traffic;
- proliferation of diseases, particularly HIV/AIDS, STIs, respiratory infections and vector- and water-borne diseases;
- increased occurrences of criminal behaviour and increased public insecurity; and
- a breakdown of cultural norms, traditional structures, leading to social ills such as alcoholism, drugs, gambling and prostitution.

¹ "Africa's attractiveness survey", Ernst & Young, 2014

An Effective Approach to Managing PIIM

The management strategies of in-migration should therefore seek a balance between enhancing positive benefits and discouraging and managing negative impacts. To do this effectively, it is essential to understand the dynamics of in-migration. The key challenges to preparing a balanced PIIMS are understanding the potential extent of influx, where it could occur, the risks it poses and the benefits that it could deliver. These challenges can be distilled down to four key ones:

- PIIM triggers an “emergent socio-economic system”. An emergent socio-economic system is characterised by complex interactions between multiple projects, stakeholders, governments, host communities, construction workforces, operational workforces and influx migrants leading to unpredictable and disruptive patterns of social, economic and environmental change. Emergent socio-economic systems are a major attribute of in-migration and a common consequence when major mining, oil & gas and infrastructure projects are developed in resource-rich regions in developing economies.
- Emergent socio-economic systems can occur rapidly and are a modern day equivalent of a “gold-rush”.
- If emergent systems are allowed to evolve unaddressed and unmanaged, the unpredictable and disruptive changes can intensify rapidly and exponentially, delaying a solution for many years and incurring substantial financial and reputational costs to the project proponents.
- Traditional impact assessment and management processes tend to be project-focused and are not designed to identify and assess in-migration that occurs over a wide footprint and where disruptive changes are rapid and difficult to predict accurately with regard to scale and location.

A PIIMS should be designed with these challenges in mind. To identify the most effective approaches, an assessment of a number of case studies of similar projects was undertaken (see *Section 4.2*). A number of common success factors in effective PIIM management were identified:

- a PIIMS should understand the complexity of the whole emergent system created by the socio-economic interaction of multiple projects and stakeholders and not be narrowly focused on the individual project;
- a PIIMS should be designed to facilitate rapid decision-making in response to rapidly emerging unforeseen challenges during the planning, construction and operational stages;

- a PIIMS should have an overall vision or strategy to enhance the positive benefits of in-migration as an equal priority to mitigating adverse impacts; and
- a PIIMS should have alignment between head-office based senior management and site-based in-country project staff so that the latter can act rapidly when an in-migration issue emerges.

The PIIMS for this Project was developed with these success factors integrated into its structure.

PIIMS Approach

The GAC PIIMS was developed in five main phases:

- **Phase 1.** Senior site-based GAC managers and the PIIMS consultants met at a three-day workshop in Dakar in April 2015 to discuss and agree the objectives of the PIIMS and how it would be designed conceptually and implemented. The objectives and a recommended outline strategy was then presented to GAC's executive management, to ensure that there was a sufficient level of alignment between site-based staff who would need to implement the PIIMS and the senior directors of GAC, who are responsible for the technical and commercial aspects of the Project. This process was deemed critical as case studies demonstrate that alignment between executive management and site-based project staff is essential when managing in-migration.
- **Phase 2.** Based on agreements at the Dakar workshop, the PIIMS outline strategy was developed into a concept strategy in early May 2016. This effort included the development of an understanding of the Project's emergent socio-economic system, that is, the identification of key stakeholders, the influence of adjacent projects, Project activities that will trigger in-migration and the likely interactions between all of these elements. Other key success factors from case studies of similar projects were identified for inclusion in the concept strategy.
- **Phase 3.** A two-week mission to site was conducted in mid to late May 2016. The PIIM concept strategy was verified and ground-truthed against the conditions observed in-country. Relevant field data were collected and analysed. A number of internal meetings were conducted with GAC staff responsible for government relations, community relations, resettlement and environmental management. In addition, a number of external meetings were undertaken with staff of adjacent projects and with prefectural-level government officers responsible for regional development. The objective of these engagements was to seek the stakeholders' input and guidance into the content and implementation of the PIIMS. The output from Phase 3 was a finalised PIIM concept strategy.

- **Phase 4.** The finalised PIIM concept strategy was then developed into a detailed submission-ready final report for internal review and external stakeholder engagement. A suite of in-migration management measures and actions were recommended for a wide-range of development scenarios to support GAC decision-making in response to rapidly emerging unforeseen in-migration challenges during the planning, construction and operational stages of the Project. This phase focused on ensuring that the PIIMS would be implementable, funded properly and managed effectively.
- **Phase 5.** In recognition that the Project will catalyze, or be part of, a larger process of local, regional and national socio-economic development, a conceptual regional development strategy was prepared to ensure that positive aspects of in-migration would be enhanced for the benefit of the project and local communities. Some of the recommended Phase 4 PIIMS measures and actions dealing with socio-economic development can only be implemented in coordination with external stakeholders, primarily the local and regional government authorities, as well as other adjacent projects driving socio-economic development in the area. Therefore, it is the Project's intention that the PIIMS will be integrated into a wider regional development and planning strategy (RDPS), with an overall vision that connects the interests of the Project with the intentions of government and expectations of local communities and other key stakeholders. This approach will facilitate the synchronisation of the Project community investment program with existing and planned development plans in the region to reduce duplication and maximise efficiency. This integrated approach to management of project-induced in-migration and delivery of sustainable regional development will be designed so that they can be transitioned to provincial and local authorities ensuring that the Project leaves a positive legacy after closure. *Section 5* of this document has more detail on the conceptual RDPS.

GAC's Commitment to Managing PIIM and Enhancing Regional Development

The following five objectives were committed to by GAC during the Phase 1 workshop:

1. The Project should address project-induced in-migration in the immediate short-term by guiding socio-economic development to the right places which can accommodate high population growth and draw in-migration away from sensitive areas.
2. In the medium term, the Project should establish a shared vision between GAC and key stakeholders that will lead to longer-term socio-economic development and diversification in the Kamsar/Boké/Sangarédi corridor in the short term and the Boké region in the long-term.

3. The project-induced in-migration strategy should be integrated into a wider regional development and planning strategy that connects the interests of the Project with the intentions of government, local communities and other key stakeholders.
4. GAC intends to transition responsibility for the conceptual regional development and planning strategy over to local and prefectural government authorities within a mutually-agreed timeframe.
5. GAC will support the development of the local and prefectural governments' ability to assume responsibility for management of project-induced in-migration and the regional development and planning process through technical and financial capacity building.

Executive Summary of PIIMS Measures

- The Project will facilitate the implementation of multi-stakeholder, district-level PIIM committees in identified in-migration hotspots before the start of construction. The general purpose of the PIIM Committees will be to plan and contribute to PIIM management in their district, to monitor PIIM and to assist the Project in implementing PIIM measures and actions.
- The Project will facilitate a land use planning and zoning exercise at potential in-migration hotspot locations to discourage informal settlement on land designated for specific purposes.
- The Project will facilitate the land use of designated buffer zones between mining areas and adjacent communities and in-migrants will be discouraged from settling in these areas by informing them that the community has designated uses for this land.
- The Project will facilitate the use of designated buffer zones for increased agricultural, pastoral and livelihood activities.
- The Project will facilitate the development of a participatory Community Investment Strategy (CIS) supporting planning, economic and infrastructure development over the Project lifecycle,
- The Project will facilitate capacity building at a prefectural level to monitor and manage in-migration within and outside the Mine and Port Areas.
- The Project will discourage the arrival of opportunistic and unskilled in-migrants looking for employment by communicating its local employment policy at national and regional levels throughout construction phase.
- The Project will discourage local communities from inciting family members and relatives from outside the region to relocate to the Project

Area by regular communication through PIIM Committees of the local employment policy.

- The Project will inform the communities of the benefits and risks of potential adverse impacts and about the PIIM measures that will mitigate these impacts.
- The Project will stipulate the priority of local procurement of labour over in-migrants by contractors in to discourage expectations by in-migrants of employment by local enterprises.
- The Project will manage the interface with the project activities and local communities in order to reduce the potential for social tension, conflicts and disputes and increased levels of crime and violence and road accidents resulting from project activities.
- The Project will facilitate through a community investment strategy the increased accessibility to existing markets and the opening of new markets for local products and services, increase local skills base, to improve opportunities for local businesses to employ in-migrants with capital and skills so that they contribute positively to the local economy.
- The Project will facilitate the implementation of measures to prevent the loss of biodiversity and critical habitat, the degradation of land use and soil productivity and the increased pressure on land use and common natural resources.
- The Project will facilitate the implementation of measures to mitigate negative social dynamics associated with in-migration.
- The Project will implement measures to mitigate the emergence of negative health impacts related to Project-induced in-migration, in particular the potential proliferation of communicable diseases and STIs related to mixing and prostitution, the increase in road accidents, and the increased pressure on health services.
- The Project will initiate the development of a diversified growth strategy that is adopted and implemented by government and ensuring that the region derives benefits from the Project.

1 INTRODUCTION

1.1 STRUCTURE OF THE SECTION

This section summarises the Project, describes the purpose of this document, outlines the policy framework under which the Project will be developed, and describes the project setting and key stakeholders.

1.2 PROJECT SUMMARY

This Project is the construction and operation of a bauxite export project by Guinea Alumina Corporation (GAC). GAC is a Guinean registered company owned by Emirates Global Aluminium (EGA), a joint venture between Mubadala, an investment and development company established by the Government of Abu Dhabi and the Investment Corporation of Dubai (ICD) established by the Government of Dubai. EGA acquired full ownership of GAC in June 2013.

Under previous ownership, in 2004, GAC signed a concession agreement with the Government of the Republic of Guinea to develop a bauxite mining and refining project in its northern concession area in the sub-prefecture of Sangarédi, prefecture of Boké, in the north-west of Guinea. The agreement also includes a port concession in the coastal city of Kamsar, to allow for the shipping of product to the international market.

The original project configuration was subject to initial social and environmental impact assessment (SEIA) studies, carried out by GAC in 2004, 2005 and 2006, and subsequently submitted to and approved by the Guinean ministry in charge of environmental affairs. The results of these SEIA studies were compiled in an integrated SEIA in 2008. The original study contemplated mining and refining operations in the northern part of the concession. The original integrated SEIA was disclosed to the International Finance Corporation (IFC) and the African Development bank (AfDB) as part of financing discussions.

After EGA acquired GAC, the Project was reconfigured and the proposed mining activities and refinery on the northern concession area were suspended. The reconfigured project will include:

- Greenfield bauxite mining activities in the southern part of the GAC concession, with capacity to produce up to 17 million tons per annum (Mtpa) of high grade bauxite;
- The development of two rail sidings connected to the existing Sangarédi to Kamsar rail line, at the mine and port locations to load and unload the ore;

- A bauxite ore crushing plant, stockyards and rail loading facility, to be located adjacent to the bauxite mine, within the concession area;
- The development of bauxite storage and export facilities at the GAC port concession in Kamsar.

1.3

PURPOSE OF THIS DOCUMENT

Between 2014 and 2016, a SEIA Addendum Study was prepared of the reconfigured Project in compliance with Guinean regulations, and in line with the requirements of international lenders, including IFC and AfDB. As part of the SEIA Addendum study, GAC recognised that the mining concession can be considered as a “critical habitats discrete management unit” (according to terminology IFC Performance Standard 6 on biodiversity) comprising sensitive natural habitats and species, which need to be considered as part of the Project’s environmental and social management. It was also recognised that a driver of impacts on habitats and biodiversity was related to Project-induced in-migration. Project-induced in-migration (also referred to as “in-migration” or “influx”) involves the rapid movement of people into an area in anticipation of, or in response to, economic opportunities associated with the development and/or operation of a new project. This document is GAC’s Project-Induced In-Migration Strategy (PIIMS), supplementing the SEIA Addendum Study.

The SEMP also recommends integrating the PIIMS into a wider Integrated Regional Development (IRD) program for the area including a permanent institutional arrangement with regional and local governments, public financing at regional and local levels, and regional ownership, aims, and responsibilities. Along those lines, the IRD program will be enhanced by a Regional Development and Planning Strategy (RDPS) conceptualised in *Chapter 5*.

1.4

POLICY FRAMEWORK

The recommendations of the PIIMS and conceptual RPDS were cognisant of the policy framework governing the movement of people in Guinea and supporting socio-economic development at a national and regional level:

- Guinea is a member of the Economic Community of West African States (ECOWAS). In theory, this entitles citizens of member states, including those of Guinea and adjacent countries, to move freely across borders to pursue economic opportunities. In reality, many of the ECOWAS agreements are not enforced leading to uncertain and unmonitored movements of populations.

- The national Urban Code stipulates the requirement for the Government to produce a National Land Development Plan and Regional Development Master Plans. These documents are intended to provide the different levels of Government with a development and investment policy and definition of a long-term vision with reference to demographics, distribution of economic activities and infrastructure and environmental protection. The Urban Code was made law in 1998 and understood to have been applied from 2000. However, these Plans could not be sourced and they appear not to have been completed or are not publicly available.
- GAC has committed to developing a project that meets IFC's performance standards (PSs). According to IFC, in-migration may be characterized as "*an unplanned but predictable impact caused by the project*" (PS1) that should be anticipated in the SEIA and mitigated in the SEMP. In-migration also has the potential to generate negative impacts for community health, safety, and security (PS4) and negatively affect involuntary resettlement (PS5), biodiversity (PS6), indigenous people (PS7), and cultural heritage (PS8).

The PIIMS and conceptual RDPS incorporated the following aspects into its structure and content in response to the policy framework instruments:

- Membership of ECOWAS – when predicting the likely level of in-migrants, consider nationals of adjacent and nearby countries such as Senegal, Guinea-Bissau, Sierra Leone, Liberia and Mali;
- National Land Development Plan and Regional Development Master Plans – facilitate the incorporation of PIIMS recommendations into these statutory instruments;
- IFC Performance Standards – ensure that the PIIMS recommendations are in alignment with recommendations in IFC's Handbook for Addressing Project-Induced In-Migration.

1.5

PROJECT SETTING

Guinea is situated in West Africa on the Atlantic Ocean. Its population is mainly rural based and largely dependent on subsistence farming. The capital of Guinea is the seaport city of Conakry, with a population of approximately two million. Guinea is rich in natural resources. Its reserves equate to more than one third of the world's bauxite (over 25 billion metric tonnes). Bauxite accounts for some 20 percent of Guinea's GDP and mining contributes some 70 percent of its exports, most of which is derived from bauxite, making it a major component of Guinea's economy. To enhance the value of mineral resources, the Government of Guinea's current policy is to expand and modernise the refinery and processing sector.

The Project is located in the region and prefecture of Boké and the sub-prefectures of Tanéné, Sangarédi and Kamsar.

The mining concession is in the sub-prefectures of Tanéné and Sangarédi. They are rural areas with a population predominantly employed in agriculture, except for the village of Tinguilinta and neighbouring settlements along the RN22 national road corridor, which have undergone some rapid growth and socio-economic changes in the past 10 years. This is partly due to the presence of GAC's Pioneer Camp and the community's expectation that GAC would start development activities in the near future. The nearest urban area is Sangarédi, approximately 20 km east of the Project mining area, a mining town whose development has been part of CBG's mining activities over several decades. Sangarédi has benefited from significant socio-economic development owing to the presence of the CBG mine, particularly the supply of electricity, water, sanitation, waste collection and health services. This has attracted significant levels of in-migration around the peri-urban areas.

The next closest urban area to the mining activities is the provincial capital of Boké, approximately 30 km west of the concession. Boké has experienced significant population growth in recent years and it has not benefited from the economic uplift from mining activity in the region. The urban utilities infrastructures (drinking water, waste water treatment, waste management, and electricity) are deficient or non-existent in Boké. The mining concession lies between these two centres.

The Project's port facilities will be located at Kamsar. Kamsar is a major city approximately 124 km south-west of the mining concession on the Rio Nuñez. Kamsar is significantly more urban and multicultural than the mining concession as a result of having developed in response to the industrial activities associated with CBG's operations, which has provided urban infrastructure (access to electricity and water) for the population living in Kamsar Cité. Economic activity in the area around Kamsar is dominated by employment at CBG or in the informal sector.

1.6

KEY STAKEHOLDERS

The PIIMS was developed in consultation with the following stakeholders:

- Strategy and Development Group, Ministry of Mines, Conakry;
- Ministry of Public Works, Conakry;

- Boké Préfecture, Prefect's Office;
- Boké Préfecture - Direction Préfectorale de l'Urbanisme, Habitat et Construction.
- District Presidents.

Discussions with stakeholders will be on going during the implementation of the PIIMS.

1.7 LINKAGES BETWEEN SEMP REQUIREMENTS AND THE PIIMS

The PIIMS measures and actions are designed to enhance and supplement the Project SEMP. *Table 1.1* summarises the in-migration impacts identified in the SEMP¹ and the associated PIIMS measures that have been designed to mitigate them.

Table 1.1 SEMP Requirements and PIIM Measures

In-migration related impacts identified in SEMP	PIIM Measures (see Section 4)
Freshwater Ecosystems	
Decrease of fish stock due to overfishing	Land Use Planning and Zoning (PIIM Measure Nr 2 – PIIM2); Designation of PIIM No-Go Buffer Zones (PIIM3); Local Capacity Building (PIIM5); Managing Environmental Impacts (PIIM10); Managing Social Dynamics (PIIM11); Regional Development Strategy (PIIM13)
Demographics and social dynamics	
Increase in social tensions	Community PIIM Committees (PIIM1); Land Use Planning and Zoning (PIIM2); Community Investment and Development (PIIM4); Local Capacity Building for PIIM Management (PIIM5); Communication and Sensitization (PIIM6); Labour Procurement through Contractors (PIIM7); Reinforcing Law and Order (PIIM8); Managing Social Dynamics (PIIM11); Managing Health Impacts (PIIM12); Regional Development Strategy (PIIM13)
Power, governance and civil society	
Strengthening of civil society	Community Investment and Development (PIIM4); Managing Social Dynamics (PIIM11); Regional Development Strategy (PIIM13)
Risk of tensions between communities and local administrative authorities around in-migration related issues	Community Investment and Development (PIIM4); Managing Social Dynamics (PIIM11) Local Capacity Building for PIIM Management (PIIM5) Regional Development Strategy (PIIM13)

¹ Social and Environmental Impact Assessment (SEIA) Addendum for GAC's Bauxite Export Project, Guinea - Volume 3, Social and Environmental Management Plan, ERM 2015

In-migration related impacts identified in SEMP	PIIM Measures (see Section 4)
Increased risk of corruption	Community Investment and Development (PIIM4); Local Capacity Building for PIIM Management (PIIM5); Regional Development Strategy (PIIM13)
Weakening of methods of traditional governance	Community PIIM Committees (PIIM1)
Land use	
Increase in land prices, increased tensions on the land resource, inequality of access to land	Community PIIM Committees (PIIM1); Land Use Planning and Zoning (PIIM2); Designation of PIIM No-Go Buffer Zones (PIIM3); Managing Social Dynamics (PIIM11); Regional Development Strategy (PIIM13)
Agriculture and cattle herding	
Increase in cost of farm labour	Community Investment and Development (PIIM4); Communication and Sensitization (PIIM6); Labour Procurement through Contractors (PIIM7); Regional Development Strategy (PIIM13)
Fishing and access to natural resources	
Degradation of the quality of surface water and pressure on the resource	Managing Environmental Impacts (PIIM10); Land Use Planning and Zoning (PIIM2); Community Investment and Development (PIIM4); Regional Development Strategy (PIIM13)
Local socio-economic context	
Increase in demand and in outlets for local produce, diversification of economic opportunities and reinforcement of local entrepreneurship	Community Investment and Development (PIIM4); Communication and Sensitization (PIIM6); Labour Procurement through Contractors (PIIM7); Procurement of Goods and Services (PIIM9); Regional Development Strategy (PIIM13)
Health and Safety	
Increased risk of diseases related to water and sanitation, and appearance of new diseases related to population movements	Community PIIM Committees (PIIM1); Community Investment and Development (PIIM4); Communication and sensitization (PIIM6); Managing Health Impacts (PIIM12), Regional Development Strategy (PIIM13)
General increase in safety risks and disease	Community Investment and Development (PIIM4); Reinforcing Law and Order (PIIM8); Managing Health Impacts (PIIM12); Regional Development Strategy (PIIM13)

2 PROJECT DESCRIPTION

2.1 STRUCTURE OF THIS SECTION

This section describes the Project focusing on the components that will stimulate in-migration. For a full and detailed Project description, refer to Chapter 2 of the *Social and Environmental Impact Assessment (SEIA) Addendum Study* undertaken by GAC for its Bauxite Export Project.

2.2 PROJECT COMPONENTS

2.2.1 General

The main project activities are:

- Construction and operation of a bauxite sampling mine in GAC's mining concession in the prefecture of Boké, sub-prefecture of Sangarédi and Tanéné, to be transported to the Port Area for export to market, commencing in mid- to late 2016.
- Construction and operation of mining activities in the southern part of the GAC mining concession and transport to GAC's port concession in Kamsar, for stockpiling, reclaiming and shipment on the international market, commencing in late 2016.

2.2.2 Mine Area

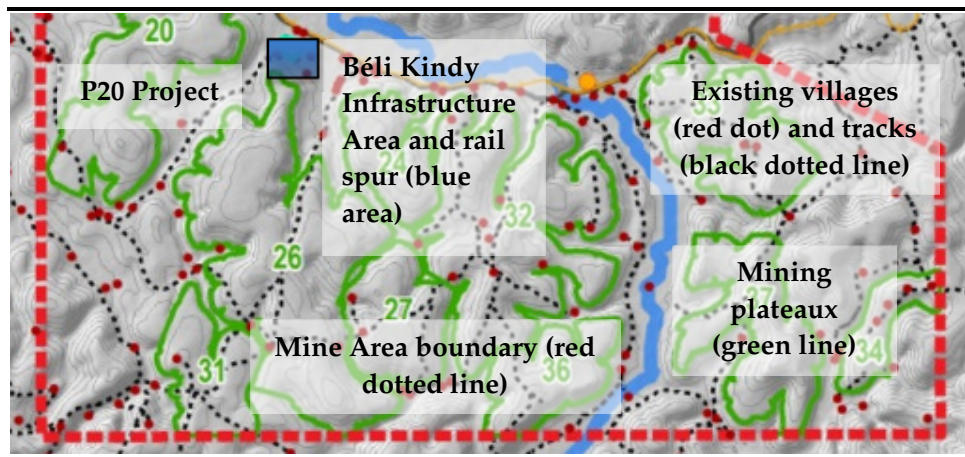
The components and activities in the Mine Area will be:

- *Plateau 20 Exploration Project ("P20 Project")*: construction and operation of a small scale mine for sending sample of bauxite to market with a project lifecycle of two to three years. The P20 Project will include:
 - > The construction and operation of a three-hectare infrastructure zone on Plateau 20 approximately 3 km south of Diarabaka on the RN22;
 - > A haul road, mobile crushing unit, loading zones, equipment maintenance, fuel storage, water supply and storm water management;
 - > Excavation of bauxite and transport to the infrastructure zone for crushing and storage;
 - > loading bauxite onto trucks for shipment to the Port Area.

- *Mining in southern part of GAC mining concession:* construction and operation of mining activities commencing in late 2016 with a project lifecycle of at least 20 years, which will include:
 - > Construction and operation of an infrastructure zone immediately south of Béli Kindy Cité village;
 - > mining activities on southern Mine Area including haul roads and transportation of bauxite to the infrastructure zone;
 - > a dam, landfill and quarries on the northern Mine Area;
 - > a rail spur at Béli Kindy Cité village;
 - > transportation of bauxite to the Port Area by rail for loading onto ships.
- *Béli Kindy Resettlement Village:* The construction of permanent resettlement villages for communities at Béli Kindy Cité sector in order to allow the construction of the Béli Kindy infrastructure zone, likely to commence in mid- to late-2016.

Figure 2.1 illustrates the configuration of the Mine Area components.

Figure 2.1 Location of Mine Area Components



2.2.3 Port Area in Kamsar

The components and activities in the Port Area will be:

- *P20 Project:* loading bauxite onto ships for export to market.
- *Port Terminal:* construction and operation construction of the port terminal infrastructure area, unloading of loading conveyor, berthing facility and rail loop.

- **Dapraress Resettlement Village:** The construction of a permanent resettlement villages for communities affected by construction of the Port Area access road at Dapraress sector, likely to commence in mid- to late-2016.

The configurations of the Port Area and Resettlement Village are shown in *Figure 2.2* and *Figure 2.3*.

Figure 2.2 *Port Area Configuration*

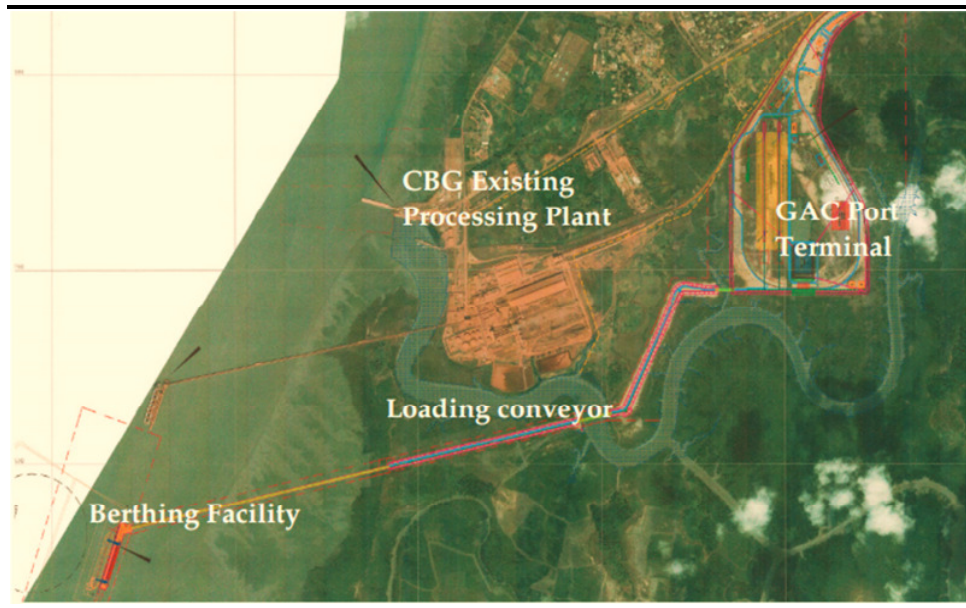
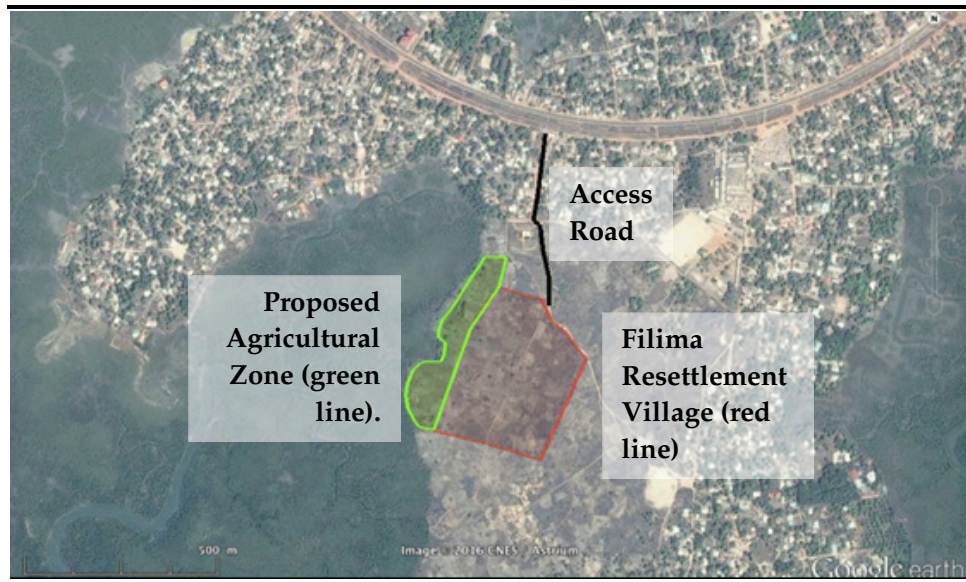


Figure 2.3 *Filima Resettlement Village Configuration*



A number of project activities will continue or commence in support of the development of these new components:

- Continued employment of existing unskilled and skilled workforce.
- Workforce transport and housing arrangements for the local skilled and unskilled workforces during construction and operations of the P20 Project and main mining projects and the construction phase of the resettlement villages.
- Local procurement of goods and services.
- Recruitment of additional local skilled and unskilled workforces required for the construction and operation of P20 Project, the main mining project on the southern Mine Area and for the construction of resettlement villages in Kamsar and on the Mine Area.
- Community investment and development activities in:
 - > social infrastructure such as improvements in health clinics and posts, schools, drilling of wells and solar lighting for villages;
 - > increased agricultural production;
 - > community health programmes, including the reduction of risks of malaria and HIV infection;
 - > upskilling and training of project affected people;
 - > provision of community facilities such as crop storage, fencing, village meeting room, video clubs and traditional oil extraction plants.

3 *SITUATIONAL & RISK/BENEFIT ANALYSIS*

3.1 *STRUCTURE OF THE SECTION*

This situational analysis provides the basis for understanding the likely pattern of development of in-migration within the Project's Area of Influence that could occur as a result of the project activities. The situational analysis includes:

- an overview of existing patterns of in-migration attributable to existing or suspended project activities over the last 10 years;
- the identification of new project components and activities likely to drive increased in-migration;
- the identification of the likely access routes and hotspots where in-migrants are likely to settle;
- a prediction of potential in-migration population intensity and range; and
- the identification of adverse risks or positive benefits of these impacts that should be managed.

3.2 *SITUATIONAL ANALYSIS OF PROJECT CONFIGURATION AND PIMM 2006 - 2011*

3.2.1 *Existing and/or Suspended Project Activities 2006 - 2016*

Between 2006 and 2011, the project configuration included¹:

- a construction camp near Tinguilinta and Doubhi sectors – operation continuing;
- a planned bauxite mine on the northern Mine Area - suspended in 2011;
- a planned alumina refinery near Boullère district town centre and Mobhi N'Dantari sector – suspended in 2011;
- a planned steam and power plant to provide the refinery with necessary steam and electricity near Boullère district town centre and Mobhi N'Dantari sector - suspended in 2011;
- container terminal in the Port Area in Kamsar - completed in 2016;

¹ Guinea Alumina Project Definition Phase Study Report, Bechtel, 2008.

- a planned materials handling jetty and bulk storage area and related industrial facilities at The Port Area for alumina export and raw material import - suspended in 2011;
- two planned rail spurs, one servicing the Port Area in Kamsar and the second servicing the refinery site in Tinguilinta sector - development modified – the rail spur in Tinguilinta sector will now be constructed in Béli Kindy Cité sector;
- a planned bauxite residue disposal area on the northern Mine Area - suspended in 2016; and
- supporting community development and investment activities in health, education and water supply – continuing to date.

3.2.2 *Project-Induced In-Migration 2004 – 2016, Mine Area*

The project's configuration between 2006 and 2011¹ generated in-migration on the Mine Area, particularly at hotspots in the closest proximity to project activities namely at Tinguilinta sector, Doubhi sector, Boullère district centre, Mobhi N'Dantari sector and district sectors adjacent to the RN22 corridor between Tinguilinta and the western boundary of the mining Mine Area (see *Figure 3.1*).

¹ Regional Sustainable Development Framework Study Report, ERM, 2011

Figure 3.1 Infographic - In-Migration Hotspots 2006 – 2011, Mine Area

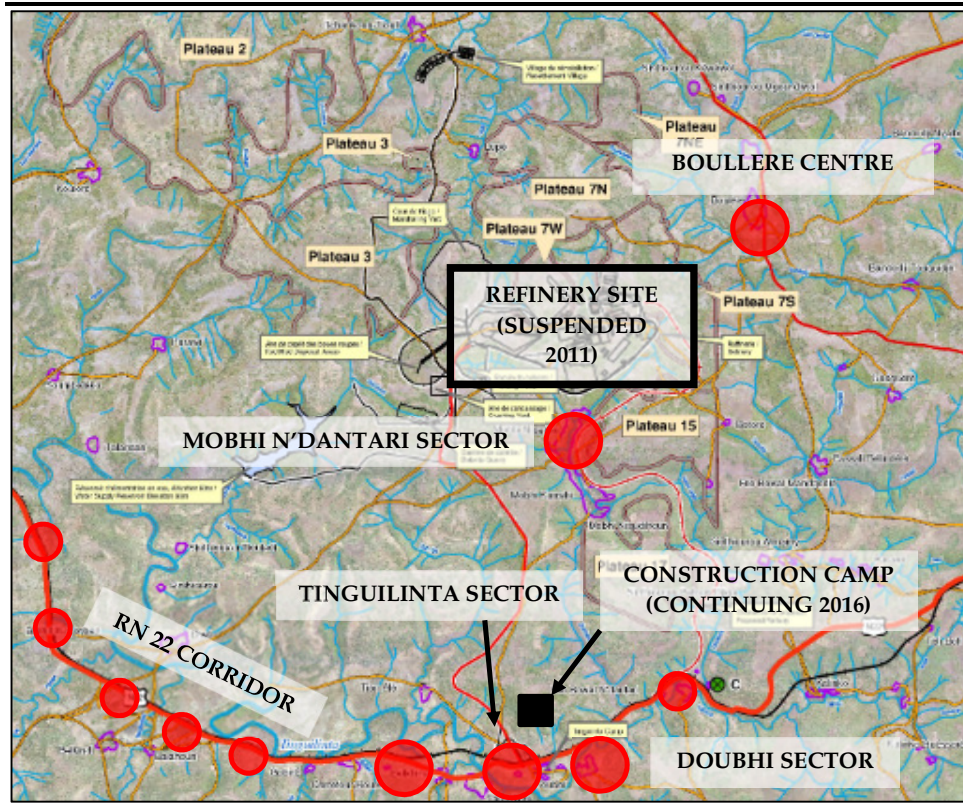


Figure 3.2 and Figure 3.3 and Table 3.1¹ illustrate the significant increase in male and female populations in these hotspots between 2004, before Project commencement, and 2011.

¹ Regional Sustainable Development Framework Study Report, ERM, 2011 Ditto

Figure 3.2 Infographic - Increase in Male Population 2004 - 2011; Mine Area

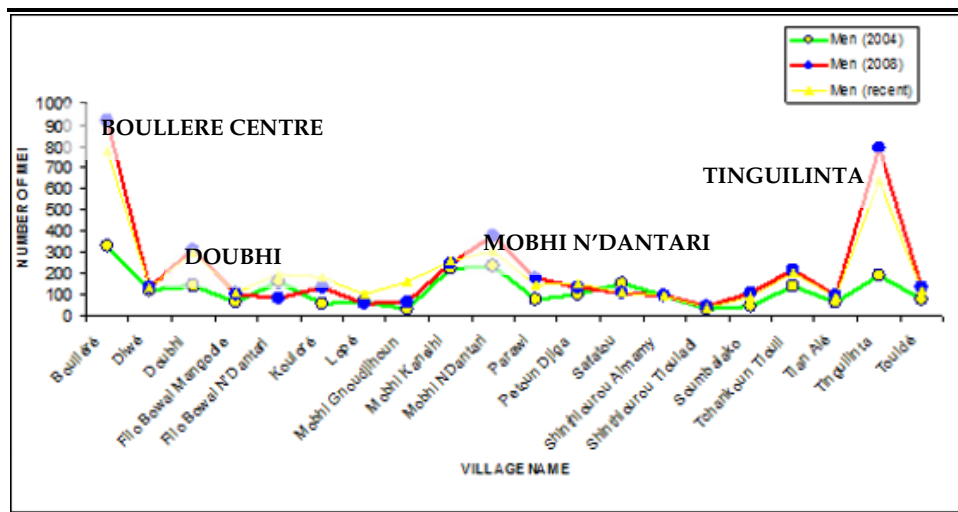


Figure 3.3 Infographic - Increase in Female Population 2004 - 2011, Mine Area

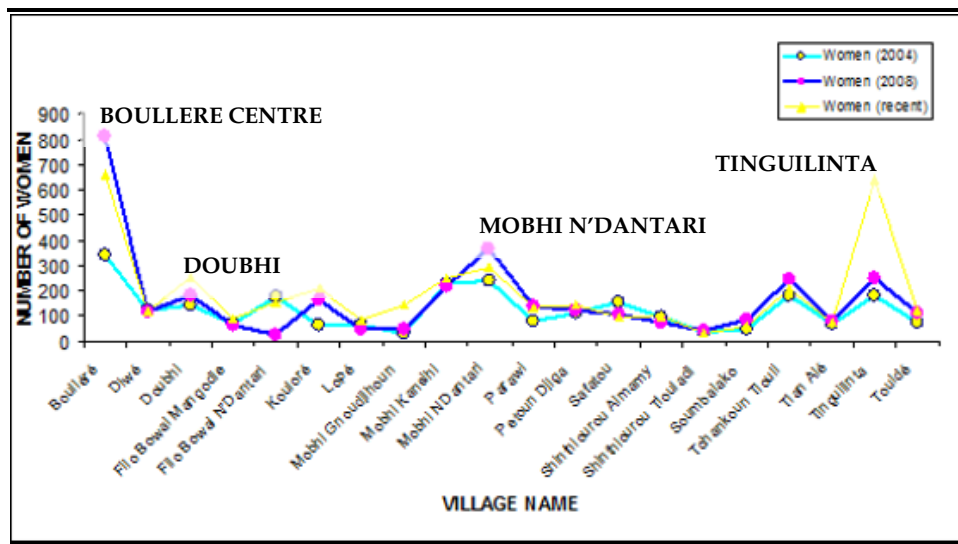


Table 3.1 Increase in Male and Female Population 2004 – 2011, Mine Area PIIM Hotspots

District / Sector	Increase in Female Population from 2004 to 2011 (percent)	Increase in Male Population from 2004 to 2011 (percent)	Average Increase Male and Female 2004 to 2011 (percent)
Tinguilinta Sector	249 percent	231 percent	240 percent
Doubhi Sector	73 percent	111 percent	92 percent
Boullère District Town Centre	94 percent	136 percent	115 percent
Mobhi N'Dantari Sector	329 percent	409 percent	369 percent

Figure 3.4 compares the size of the original combined male and female hotspot populations in 2006 with the increased population in 2011.

Figure 3.4 *Infographic - Comparison of the Original Population 2004 with Increased Population 2011, Mine Area Hotspots*

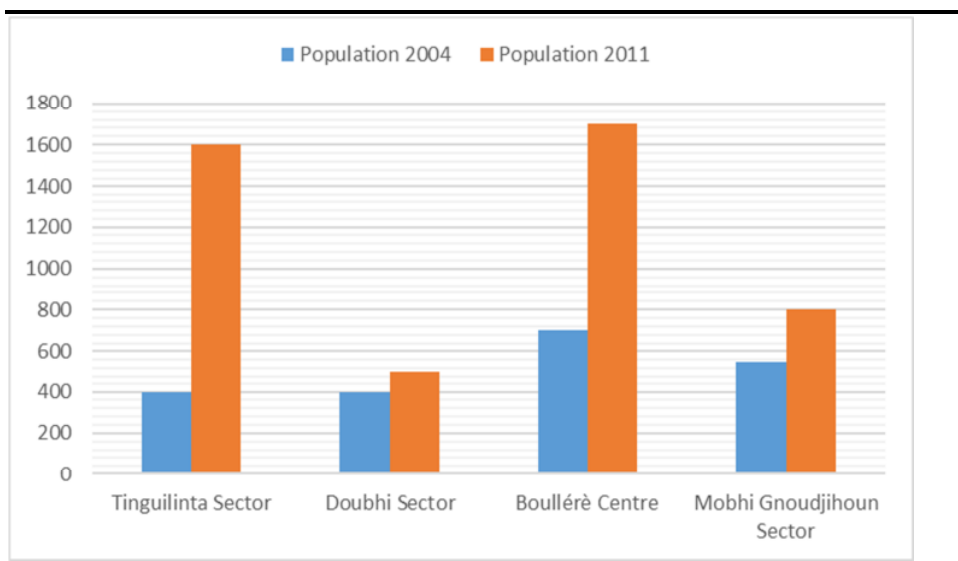


Table 3.2 analyses the socio-economic, bio-physical and urban planning push/pull factors of the PIIM hotspots in order to identify the factors which triggered in-migration in these locations.

Table 3.2 *Push/Pull Factors, Mine Area PIIM Hotspots 2006 - 2011*

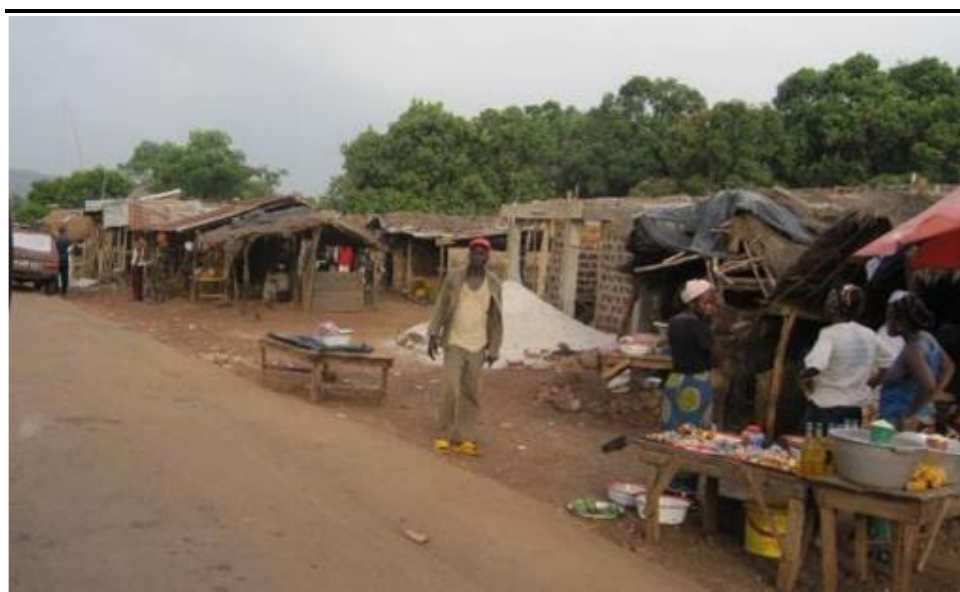
PIIM Hotspot Push/Pull Factor	Tinguilinta Sector	Doubhi Sector	Boullère District Town Centre	Mobhi N'Dantari Sector
<i>IFC Handbook on PIIM</i> ¹				
High level of local unemployment	✓	✓	✓	✓
Adjacent to direct and indirect construction phase labour requirements (particularly the need for recruitment of unskilled labour)	✓	✓	✓	✓
Construction phase demand for goods and services by the project	✓	✓		✓
Increase in access and availability of infrastructure (roads, services (transportation, education and health), and utilities (water and sanitation),).	✓	✓	✓	✓
Increase in access and availability of resources for third parties (e.g., new haul roads)	✗	✗		✓

¹ Extracted from IFC Handbook for Addressing Project-Induced In-Migration, 2008, Page 74

PIIM Hotspot Push/Pull Factor	Tinguilinta Sector	Doubhi Sector	Boullère District Town Centre	Mobhi N'Dantari Sector
Opportunities for land speculation associated with project development	✓	✓	✓	✗
Sited Based Analysis				
Nearest settlement to major project components	✓	✓	✓	✓
Proximity to a major transport corridor	✓	✓	✗	✗
Presence of urbanised areas near project activities with some basic level of services	✓	✓	✓	✗
Proximity to project-induced in-migration on adjacent projects	✓	✓	✓	✓
Availability of unused or under-utilised land for informal settlement	✓	✓	✓	✓
Reliance on subsistence livelihood activities	✓	✓	✓	✓
Community development and investment in health, education and water supply	✓	✓	✓	✓

Figure 3.5 illustrates encroachment of in-migration community at Tinguilinta Sector along the RN22, which is a settlement that has experienced significant growth between 2004 and 2011.

Figure 3.5 *PIIM Encroachment along RN22 - Tinguilinta Sector*

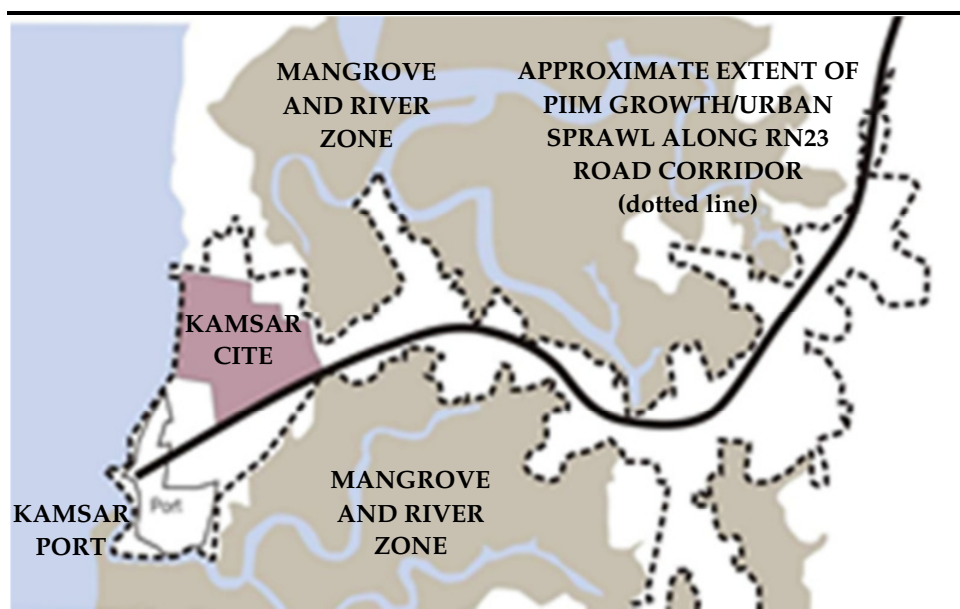


No data were readily available to allow an assessment of the magnitude of in-migration attributable to project activities in Kamsar. In general, Kamsar has experienced significant growth well beyond its planned population of 40,000 people and as of 2016 the population is at least 113,000 and possibly as high as 380,000¹. The growth in population well beyond the planned population is attributable to the activities of Compagnie des Bauxites de Guinée (CBG).

Error! Reference source not found. illustrates the in-migration pattern which has developed in Kamsar since CBG began its operations in the early 1970s. It is characterised by:

- a small planned city centre adjacent to a port with supporting infrastructure and services such as water and electricity provided free of charge to the population; and
- a larger zone of dense in-migration populations which have settled on available land along the RN23 road corridor to the east but constrained by mangrove and river zones to the north and south.

Figure 3.6 Population Growth Kamsar



Based on site analysis conducted in Kamsar, a number of push and pull factors were identified which drove the PIIM pattern since the early 1970s and are summarised on *Table 3.3*.

¹ The preliminary results of the census conducted by the Government of Guinea for the year 2014, estimate the population at 113,108 inhabitants. In 2006, some estimates were already higher, atwitch about 179,000 inhabitants (*Knight Piésold Consulting, 2008 ESIA Guinea Alumina Project*)). ANAIM, the Guinean government department responsible for management of mining infrastructure, estimated Kamsar's estimates the population at approximately around 380,000 inhabitants.

Table 3.3 *Push/Pull Factors, Kamsar PIIM Hotspots*

PIIM Hotspot Push/Pull Factor	Kamsar Cite	Kamsar Peri-urban
IFC Handbook on PIIM ¹		
High level of local unemployment	✓	✓
Adjacent to direct and indirect construction phase labour requirements (particularly the need for recruitment of unskilled labour)	✓	✗
Construction phase demand for goods and services by the project	✓	✓
Increase in access and availability of infrastructure (roads, wharves), services (transportation, education and health), and utilities (water and sanitation, electricity).	✓	✓
Increase in access and availability of resources for third parties (e.g., new roads)	✓	✓
Opportunities for land speculation associated with project development	✓	✓
Site Based Analysis		
Proximity to project components	✓	✗
Proximity to a major transport corridor	✓	✓
Presence of urbanised areas near project activities with some basic level of services	✓	✓
Proximity to project-induced in-migration	✓	✓
Availability of unused or under-utilised land for informal settlement	✗	✓
Reliance on subsistence livelihood activities	✗	✓
Community development and investment in health, education and water supply	✓	✗

3.2.4 *Summary of Push and Pull Factors Driving PIIM on Mine Area and in Kamsar*

The push and pull factors listed in *Table 3.2* and *Table 3.3* can be grouped into four main categories:

- *Socio-economic push factors:* high levels of national and regional unemployment combined with high levels of national and regional subsistence livelihood activities across the region pushed in-migrants to the Mine Area and Kamsar as they are perceived as economically progressive regions.
- *Socio-economic pull factors:* In-migrants were pulled by the perception of potential recruitment of skilled and unskilled labour by mining companies for direct by the project or indirectly through employment with SMEs that

¹ Extracted from IFC Handbook for Addressing Project-Induced In-Migration, 2008, Page 74

supply goods and services to mining companies or mining company employees.

- *Bio-physical pull factors:* In-migrants were pulled by the construction of access roads across the Mine Area which significantly increased access to unused and/or underutilised land for settlement, agricultural and hunting activities.
- *Urbanisation (built environment, infrastructure and services provision) pull factors:* In-migrants were pulled by the combination of the presence of existing urbanisations with basic services, project community development activities (such as construction of health posts, schools, wells and markets) and existing in-migration populations all in proximity to a major transport corridor.

3.3 **PROJECT COMPONENTS AND ACTIVITIES 2016 AND LIKELY PIIM PATTERNS**

3.3.1 ***New Project Components and Activities, 2016 and Beyond***

The configuration of the new Project components planned for 2016 is described in detail in *Section 2*. In summary they are:

- Construction and operation of the Plateau 20 exploration Project on the Mine Area and the Port Area in Kamsar - planned to commence in late 2016.
- The construction of permanent resettlement villages for project affected communities at Filima sector in Kamsar and Béli Kindy Cité sector on the Mine Area, likely to commence in mid- to late-2016.
- Construction and operation of mining components and associated activities on the southern Mine Area, construction and operation of a dam, quarry and landfill on the northern Mine Area – planned to commence in late 2016 with a project lifecycle of at least 20 years.
- Continued employment of existing unskilled and skilled workforce.
- Recruitment of additional local 70 skilled and unskilled 10 workers required for the construction and operation of Plateau 20 exploration Project.
- Recruitment of 4,580 workers required for the construction and 975 workers required for the operation of the main mining project on the southern Mine Area and in the Port Area.
- Recruitment of approximately 290 workers for the construction of resettlement villages in Kamsar and on the Mine Area.

- Workforce transport and housing arrangements for the local skilled and unskilled workforces during construction and operations of the Plateau 20 exploration Project and main mining projects and the construction phase of the resettlement villages.
- Local procurement of goods and services.
- Community investment and development activities.

Table 3.4 indicates which of the Project components and associated activities will trigger in-migration, in which phase it will occur and the underlying push and pull factor.

Table 3.4 Project Components and Activities Triggering PIIM

Project components and activities that trigger in-migration.	PROJECT COMPONENTS	
	Construction Phase Push & Pull Factor	Operation Phase Push and Pull Factor
Plateau 20 Exploration Project		
Unskilled workforce recruitment	Attracts in-migrants seeking employment with the Project	Attracts in-migrants seeking employment with the Project
Unskilled workforce accommodation	<i>Not applicable – employees will be accommodated on site and therefore controlled access during construction will prevent in-migrants settling near workforce accommodation</i>	<ul style="list-style-type: none"> • Attracts in-migrants seeking to offer goods and services to Project employees by settling near them • Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Unskilled workforce transport	<i>Not applicable – employees will be picked up at controlled stop locations</i>	Attracts in-migrants seeking to offer goods and services to Project employees by settling near transport routes
Skilled workforce recruitment	Front gate and nearest urbanisations - Attracts in-migrants seeking employment with the Project	Front gate and nearest urbanisations - Attracts in-migrants seeking employment with the Project
Skilled workforce accommodation	<i>Not applicable - controlled access during construction will prevent in-migrants settling near workforce accommodation</i>	<ul style="list-style-type: none"> • Attracts in-migrants seeking to offer goods and services to Project employees by settling near them • Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Skilled workforce transport	Attracts in-migrants seeking to offer goods and services to Project employees by settling near transport routes	Attracts in-migrants seeking to offer goods and services to Project employees by settling near transport routes
Project Front Gate & Boundary	• Attracts in-migrants seeking to	• Attracts in-migrants seeking to

Project components and activities that trigger in-migration.	PROJECT COMPONENTS	
	Construction Phase Push & Pull Factor	Operation Phase Push and Pull Factor
	offer goods and services to Project employees by settling near them <ul style="list-style-type: none"> Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live 	offer goods and services to Project employees by settling near them <ul style="list-style-type: none"> Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Community investment and development	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools

Resettlement Villages

Unskilled workforce recruitment	As per Plateau 20 exploration Project	As per Plateau 20 exploration Project
Unskilled workforce accommodation	As per Plateau 20 exploration Project	As per Plateau 20 exploration Project
Unskilled workforce transport	As per Plateau 20 exploration Project	As per Plateau 20 exploration Project
Skilled workforce accommodation	As per Plateau 20 exploration Project	As per Plateau 20 exploration Project
Resettlement village	Attracts in-migrants seeking to settle in locations where there are perceived improved access to basic services and utilities.	Attracts in-migrants seeking to settle in locations where there are perceived improved access to basic services and utilities.
Community investment and development	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools

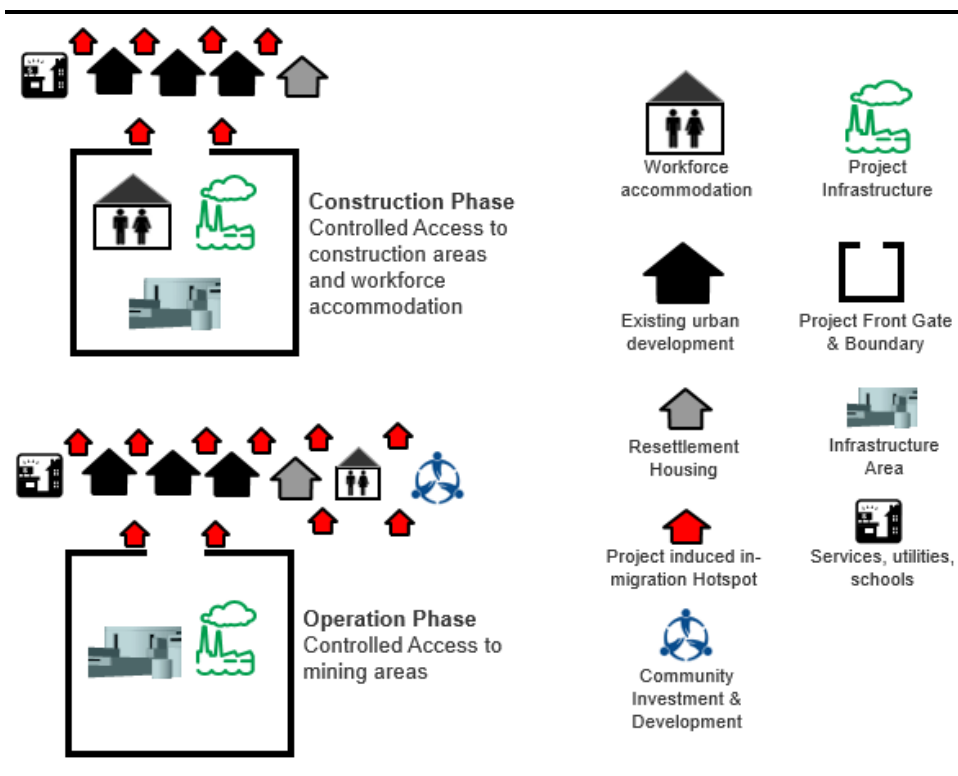
Mining on Southern Mine Area

Unskilled workforce recruitment	Attracts in-migrants seeking employment with the Project	Attracts in-migrants seeking employment with the Project
Unskilled workforce accommodation	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to Project employees by settling near them Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live 	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to Project employees by settling near them Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Unskilled workforce transport	Attracts in-migrants seeking to offer goods and services to Project employees by settling near transport routes	Attracts in-migrants seeking to offer goods and services to Project employees by settling near transport routes
Skilled workforce recruitment	Front gate and nearest urbanisations - Attracts in-migrants seeking employment with the Project	Front gate and nearest urbanisations - Attracts in-migrants seeking employment with the Project
Skilled workforce accommodation	<i>Not applicable - controlled access during construction will prevent in-</i>	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to

Project components and activities that trigger in-migration.	PROJECT COMPONENTS	
	Construction Phase Push & Pull Factor	Operation Phase Push and Pull Factor
	<i>migrants settling near workforce accommodation</i>	Project employees by settling near them <ul style="list-style-type: none"> Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Skilled workforce transport	<i>Not applicable - controlled access during construction</i>	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to Project employees by settling along transport routes
Project Front Gate & Boundary	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to Project employees by settling near them Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live 	<ul style="list-style-type: none"> Attracts in-migrants seeking to offer goods and services to Project employees by settling near them Attracts in-migrants seeking to settle in existing urban areas with some basic services and utilities where Project employees live
Community investment and development	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools	Attracts in-migrants seeking to settle in locations where there are basic services, utilities and schools

Error! Not a valid bookmark self-reference. illustrates how hotspots triggered by PIIM are likely to emerge spatially during construction and operation phases.

Figure 3.7 Infographic – Likely Spatial Patterns of PIIM Hotspots During Construction and Operation



The location and configuration of the project workforce accommodation and transport during construction and operation have a strong linkage to where in-migrants will seek to settle and the intensity of settlement. In Guinea, a mining workforce is well-remunerated compared to the local population where the multidimensional poverty levels are high. The workforce has a degree of discretionary disposable income that is attractive to an in-migrant's desire to offer goods and services. The in-migrants will seek to locate themselves as close as possible to the project workforce and as a worker is more accessible at their place of residence and along his/her transport route to work than on a mine site, workforce accommodation locations, and transport routes are strong pull factors for in-migration.

Therefore, during construction, PIIM hotspots are likely to emerge:

- next to existing urbanisations where there is potential access to basic services, utilities and schools and indirect employment for SMEs that might provide goods and services to the Project;
- as close as possible to the controlled access zone front gate of the construction area where is the potential for access to perceived employment opportunities and to offer goods and services to a well-remunerated construction workforce;

- next to resettlement villages where there is a perception that the Project will continue to support the resettled population with improved access to services, utilities, schools and employment.

During operation. PIIM hotspots are likely to emerge:

- As per the construction phase;
- next to workforce housing where there is potential access to improved services, utilities and schools and to offer goods and services to a well-remunerated operations workforce.

3.4 ASSESSMENT OF PIIM IMPACTS

3.4.1 Approach

The approach to identifying PIIM impacts was:

- to estimate the potential PIIM population;
- to assess the capacity of the host communities to assimilate in-migrants;
- to assess the resulting impacts that should be managed by the PIIMS;
- to identify the likely location and intensity of PIIM hotspots.

3.4.2 Predicted PIIM Population

IFC's handbook on managing influx indicates that every formal job created within a mining project could lead to between three to ten additional jobs in the project area (see *Figure 3.8*).

Figure 3.8 *Typical In-Migration Scenarios depending on Workforce Population¹*

No	Phase	Workforce	In-migration Scenario		
			Low (x3)	Medium (x6)	High (x10)
1	Construction	10,000	30,000	60,000	100,000
2	Operation	7,000	21,000	42,000	70,000

Figure 3.9 summarises the combined workforce for the Plateau 20, resettlement and mining Projects during construction and operation.

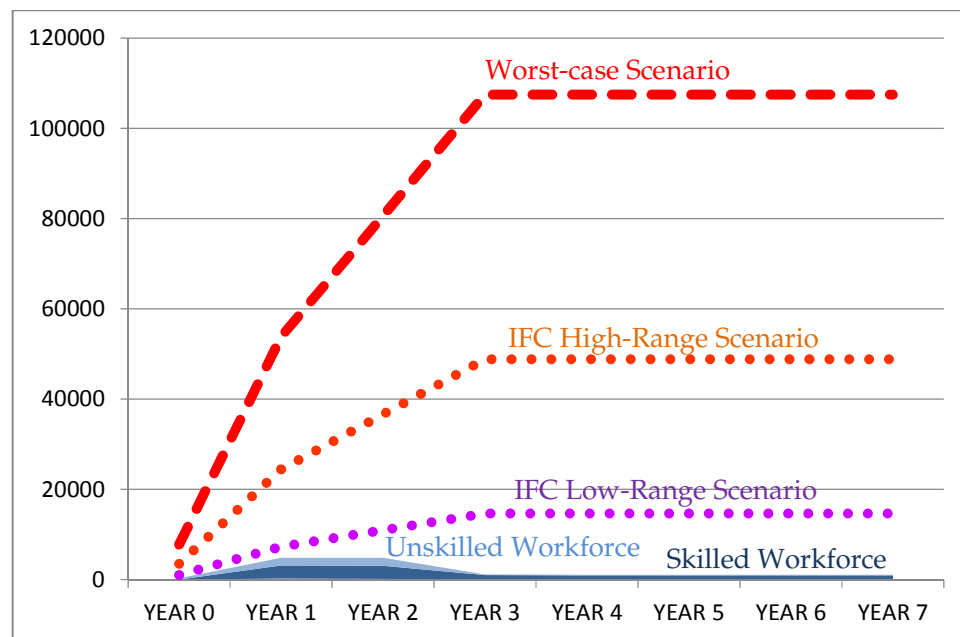
¹ IFC's Handbook for Addressing Project-Induced In-Migration, 2009

Figure 3.9 *Infographic - Combined Workforce Populations – All Project Components During Construction & Operation*



Workforce populations will peak in Year 2 after Project commencement at approximately 4,880 workers, after which it would fall to approximately 1,080 works from Year 5 onwards when all construction phases would be complete. Using the IFC hypothetical scenarios, a predicted range of in-migration population was calculated as is shown in *Figure 3.10*.

Figure 3.10 *Infographic - Predicted PIIM Arrivals from Commencement to Year 7*



The IFC low-range scenario for in-migration arrivals would be approximately 14,500 (purple line, *Figure 3.10*), while the high-range scenario would be approximately 49,500 arrivals (orange line, *Figure 3.10*). However, a review of a

similar project in the Democratic Republic of the Congo (DRC) with a similar level of multidimensional poverty¹ (a measurement of acute deprivation in health, education and standard of living) and population mobility, has a multiplier of 22 in-migrants for each project worker. If this multiplier was used, the in-migration worst-case scenario could be as high as 107,000 arrivals (*red line, Figure 3.10*).

3.4.3 *Assessment of Capacity of Host Communities to Assimilate PIIM*

The workforces will be divided relatively equally between the Mine Area and the Port Area during construction and operation phases. For the purposes of assessing the capacity of host communities to assimilate PIIM, it is assumed that in-migrants will follow this pattern. It is considered unlikely that all in-migrants will arrive at either the Mine or Port Area.

Error! Reference source not found. and *Figure 3.12* compare the number of arrivals to the existing Mine Area and Kamsar populations. The current population in the Mine Area is approximately 17,500. The population of Kamsar is between 113,000 and 380,000, therefore an average of 226,000 was assumed².

¹ UN Development Programme - Human Development Report, 2015

² Population of Kamsar used to create this figure an average of three population estimate sources, 113,000 (Government of Guinea census), 179,000 (2008 ESIA) and 380,000 (ANAIM 2014 estimate)

Figure 3.11 *Infographic - Comparison of PIIM Population Predictions with Existing Population in Mine Area*

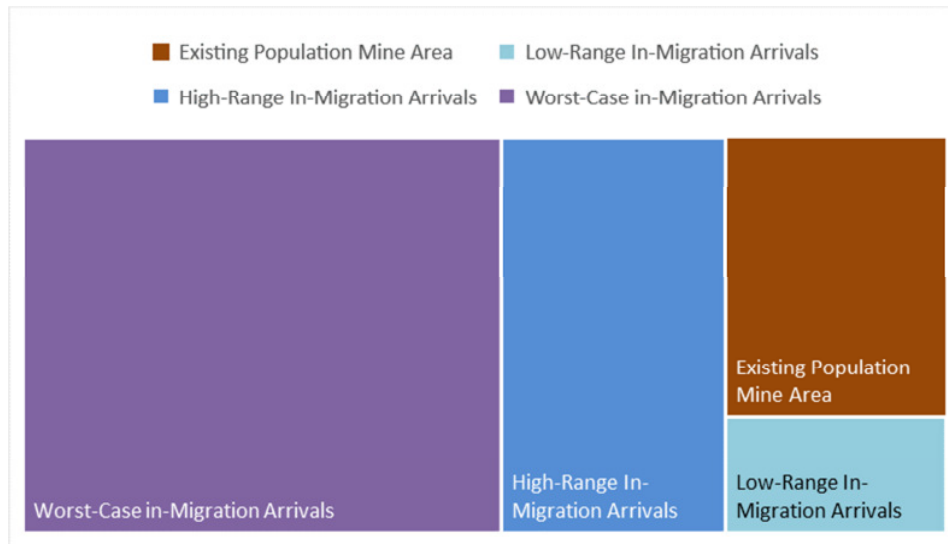
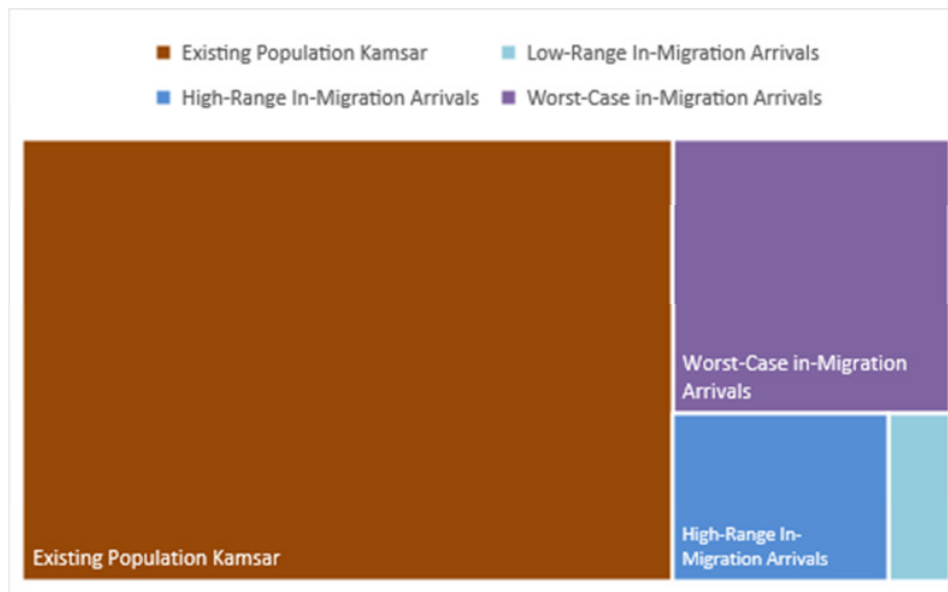


Figure 3.12 *Infographic - Comparison of PIIM Population Predictions with Existing Population in Kamsar¹*



Guinea’s current population growth rate is between 2 and 3%² and most urban planning methodologies use this metric as a guide to guiding sustainable development policies. The low-range figures above represent rapid population growth substantially higher than this and illustrate that the capacity of the Mine Area to absorb in-migrants from each scenario is not

¹ Population of Kamsar used to create this figure assumed to be 224,000, an average of three population estimate sources, 113,000 (Government of Guinea census), 179,000 (2008 ESIA) and 380,000 (ANAIM estimate)

² <http://data.un.org/>

sufficient without a substantial increase in available land, infrastructure, services and utilities. Kamsar has the potential to assimilate a low-range scenario population owing to the advantages of being a large urbanisation with a basic level of infrastructure, utilities and services but is unlikely to have the capacity to assimilate a high-range or worst-case PIIM population.

3.4.4 Predicted Impacts of PIIM at the Mine Area and Kamsar

Table 3.5 summarises the type of impacts that could occur at the Mine Area and Kamsar as a result of the predicted numbers of in-migration and the lack of capacity to assimilate them. The PIIMS is intended to enhance the positive impacts and mitigate the negative ones.

Table 3.5 Summary of Predicted PIIM Impacts

PIIM Impact ✘ Negative Impact ✔ Positive Impact	Location	
	Mine Area	Kamsar
Environment		
Logging, deforestation, slash and burn agricultural activities	✘	
Loss of diversity and critical habitat	✘	
Change of land use and degradation, erosion and loss of soil productivity, depletion of natural resources (fuelwood, water, aquatic resources, etc.)	✘	✘
Increased pressure on, and possible disputes over, land use and common property natural resources	✘	✘
Air, noise, water, and soil pollution	✘	✘
Infrastructure, Services and Utilities		
Increased use of existing roads and transportation systems	✘	✘
Increased pressure on education and health services	✘	✘
Increased demand for electricity, water supplies, and sanitation	✘	✘
Unplanned and uncontrolled development of squatter settlements	✘	✘
Increased demand on communications networks	✘	✘
Increased demand for housing	✘	✘
Increased use of/demand for community, religious, and recreational facilities	✘	✘
Potential increase of access through development of road systems	✔	
Potential increased access to user-pays information and communication	✔	✔
Improved access to user-pays housing, water and sanitation	✔	✔
Improved access to and expansion of infrastructure, public services and User-pays utilities (health, education, waste management, electricity, water supplies, telecommunications)	✔	✔
Local Economy and Livelihood		
Increased poverty associated with lower standards of living potentially linked to in-migration	✘	✘
Increased cost of living (inflation)	✘	✘
Competition for economic resources and employment, e.g., loss of productive land to urban settlement	✘	✘

PIIM Impact	Location	Mine Area	Kamsar
✘ Negative Impact	✔ Positive Impact		
Reduced availability and increased cost of land, food, fuel and housing		✘	✘
Reduced reliance on local subsistence production systems		✘	
Increased dependence on broader cash-based economy to meet needs		✘	✘
Increased economic vulnerability for marginal groups (women, elderly, minorities, etc.)		✘	✘
“Boom /Bust” cycles associated with initial construction, eventual closure		✘	✘
Increased links to mainstream economy		✔	✔
Increased local skills base		✔	✔
Business development opportunities		✔	✔
Employment creation		✔	✔
Increased local labour pool		✔	✔
Opening of new markets for local products and services		✔	✔
Increased accessibility and availability of goods and services		✔	✔
Alternate livelihood opportunities		✔	✔
Improved local wage and income levels (including opportunities for local sourcing and higher prices obtainable for local products)		✔	✔
Increased local tax revenue levels		✔	✔
Increased individual, household, and community empowerment stemming from increased income and wealth		✔	✔
Health & Safety			
Increased risks of traffic accidents associated with project-induced traffic		✘	✘
Increased pollution (air, water, dust, noise, traffic)		✘	✘
Proliferation of communicable diseases (including sexually transmitted infections, respiratory infections, waterborne diseases)		✘	✘
Insufficient number of health centres, staff and medical supplies, inadequate public hygiene facilities		✘	✘
Changes in nutrition status		✘	✘
Social Dynamics			
Impacts on traditional beliefs, damage to cultural heritage, loss of knowledge, skills, and experience related to traditional livelihood activities, upheaval in traditional leadership, behaviour, customs, values, and norms, changes in power relationships, including undermining and changing of leadership and traditional authority structures		✘	
Welfare imbalances and differential wage incomes, wealth accumulation and Opportunities		✘	✘
Dilution of social cohesion and cultural disruption (separation of households and communities)		✘	
Changing relationships between groups (gender, age, socioeconomic status, ethnicity)		✘	
Possible marginalization of women, ethnic minorities, and other vulnerable groups		✘	✘
Loss of local identity		✘	
Creation of land markets leading to changes in traditional land tenure systems		✘	
Increased tension, disputes, and conflicts between locals and migrants concerning natural resources, employment opportunities, and other project benefits		✘	

PIIM Impact ✘ Negative Impact ✔ Positive Impact	Location	Mine Area	Kamsar
	Increased incidence of social ills, including alcoholism, drug abuse, prostitution, gambling		✘
Increase in domestic violence, increase in criminality, decrease in law and order, increased ethnic tension and violence		✘	✘
Opportunities to build community organizational structures		✔	✔
Increased attention and input by government authorities, NGOs, increased political power		✔	✔

3.4.5 Location and Intensity of Hotspots

During Construction Phase

Error! Not a valid bookmark self-reference. illustrates how hotspots triggered by PIIM are likely to emerge spatially during construction and operation phases.

Figure 3.7 above illustrates how hotspots triggered by PIIM are likely to emerge spatially during the construction phase. At the present stage of project planning, the proponent has finalised all of the unskilled and skilled labour recruitment and transportation policy settings for the construction phase of each of the Plateau 20 Project, resettlement and mining Projects. They are summarised in Table 3.6.

Table 3.6 Workforce Recruitment, Accommodation and Transport Policy Settings for Each Project Component during Construction

Unskilled and Skilled Accommodation and Transport Policy Settings	CONSTRUCTION PHASE	
	Mine Area	Port Area
Plateau 20 Project		
Unskilled workforce recruitment	Allocated equitably by district presidents of the eight districts on mining concession	Within Kamsar
Unskilled workforce accommodation	By worker	By worker
Unskilled workforce transport	By company or contractor	By worker
Skilled workforce recruitment	Nationally	Nationally
Skilled workforce accommodation	Construction camp	Construction camp
Skilled workforce transport	By company or contractor	By company or contractor
Resettlement Villages		
Unskilled workforce recruitment	Affected community given priority then allocated equitably by district presidents of the eight districts on mining concession	Affected community given priority then from within Kamsar
Unskilled workforce	By worker	By worker

Unskilled and Skilled Accommodation and Transport Policy Settings	CONSTRUCTION PHASE	
	Mine Area	Port Area
accommodation		
Unskilled workforce transport	Contractor/Worker	Contractor/Worker
Skilled workforce recruitment	Nationally	Nationally
Skilled workforce accommodation	Construction camp	Construction camp
Skilled workforce transport	By company or contractor	By company or contractor
Mine Area		
Unskilled workforce recruitment	Allocated equitably by district presidents of the eight districts on mining concession	Within Kamsar
Unskilled workforce accommodation	By worker	By worker
Unskilled workforce transport	By worker	By worker
Skilled workforce recruitment	Nationally	Nationally
Skilled workforce accommodation	Construction camp	Construction camp
Skilled workforce transport	By company or contractor	By company or contractor

The impact of in-migration associated with the construction phase will be managed by incorporating PIIMS enhancements into the Project SEMP (see *Section 4.5*).

During Operation Phase

The accommodation, transport and community development policy settings for the operations phase of the Plateau 20 Project and southern Mine Area activities are continuing to be developed at this point of the project planning process. There are a wide range of approaches available to the project proponent and each will be need to be examined to identify those that will meet IFC international standards¹ and in a configuration that is cost-effective.

Some of the approaches can only be deployed by the project proponent with significant level of collaboration and cooperation by other stakeholders. For example, some accommodation and community development strategies can only be implemented within a wider regional development strategy requiring extensive consultation with relevant stakeholders, including government authorities at all levels, local communities and adjacent concessionaires, requiring considerable time and resources (see *Section 5* for detailed analysis on the linkage between PIIM management and regional development planning).

In order to predict the intensity and spatial layout of PIIM during operation, a number of alternative accommodation and transportation policy setting options for unskilled and skilled workers were identified. A spatial development scenario was developed for each option through a number of

¹ IFC and EBRD 2009: Workers' accommodation - processes and standards

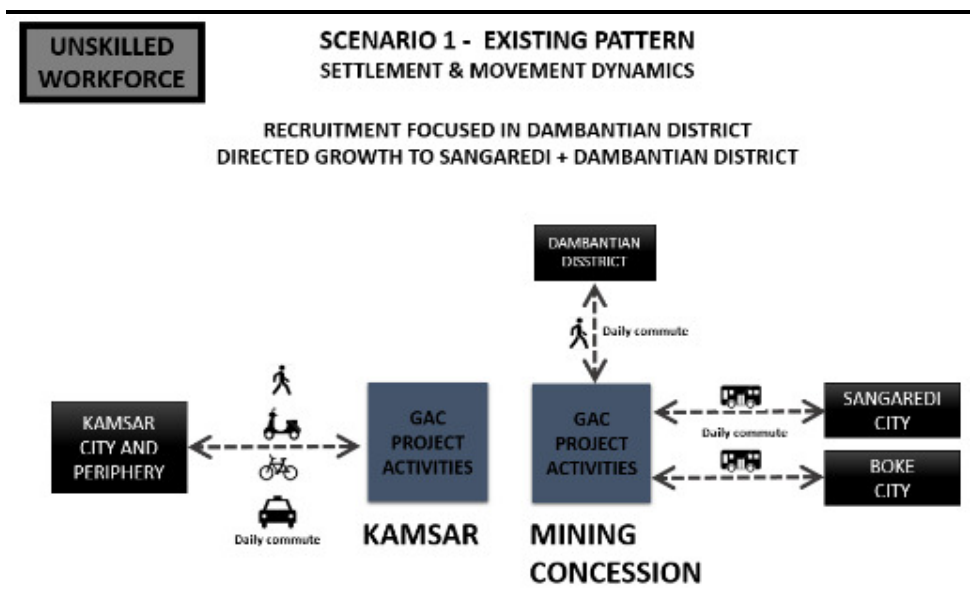
high-level assumptions on the configuration of workforce accommodation and transport and the likely settlement and movement patterns that will emanate from these policies. These scenarios and assumptions are described and illustrated below.

Scenario 1 – Unskilled Workforce – Existing Pattern

The key assumptions are:

- Recruitment practices will continue to favour hiring unskilled workers from Dambantian district nearest the project components or in Kamsar and to live in their existing homes in Dambantian and Tanéné districts, and in the cities of Sangarédi, Boké and Kamsar.
- On the Mine Area, unskilled workers will continue to commute daily to work by foot or company bus from their places of residence to Project area or by company bus from the cities of Sangarédi and Boké.
- In Kamsar, unskilled workers will continue to commute daily to the Port Area by a variety of transport modes.

Figure 3.13 *Scenario 1 Infographic – Unskilled Workforce – Existing Pattern of Settlement and Movement*



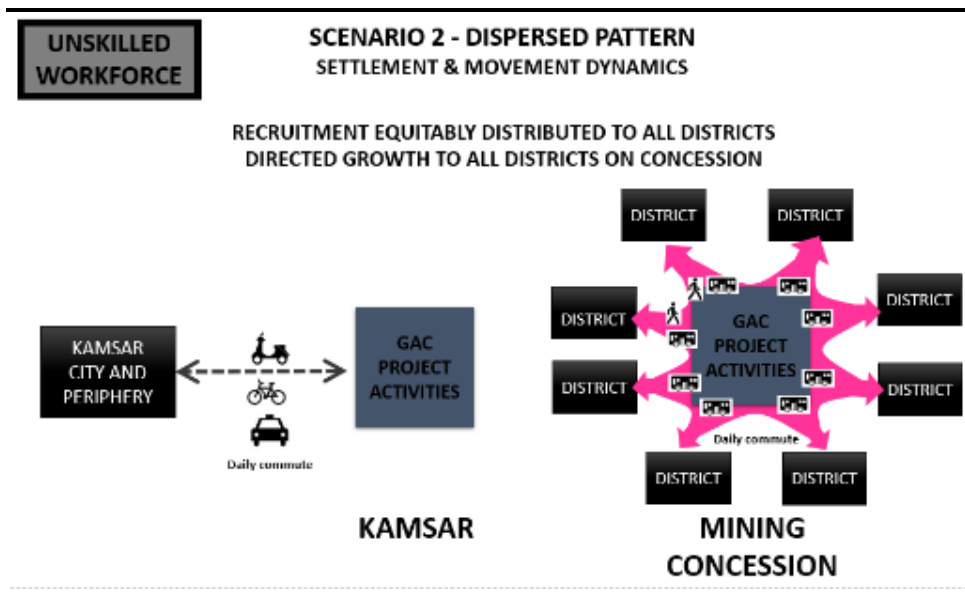
The predicted pattern of in-migration for this scenario is that PIIM hotspots will increase in intensity in Dambantian and Wossou districts, particularly Tinguilinta sector and Bely Kindy Cité and that uncontrolled population increase will occur in the cities of Sangarédi, Boké and Kamsar.

Scenario 2 – Unskilled Workforce – Dispersed Pattern

The key assumptions of Scenario 2 are:

- The unskilled Mine Area workforce will be recruited equally from the eight districts on the concession through a quota system.
- The unskilled Port Area workforce will be recruited from Kamsar generally.
- The Project's preferred strategy is a dispersed pattern where the workforce continues to live in their houses in their home villages and the indirect benefits of paid employment are dispersed across the widest possible area.
- On the concession, unskilled workers will commute daily to work by a company bus service extended to the eight district capitals, or by taxi pooling, car-pooling or motorcycle. The existing unskilled workforce will continue to walk from districts near project components (Dambantian, Wossou and Tanéné) or use the company bus from the cities of Sangarédi and Boké.
- In the Port Area, unskilled workers will continue to commute daily to work by a variety of transport modes.

Figure 3.14 Scenario 2 Infographic - Unskilled Workforce - Dispersed Pattern



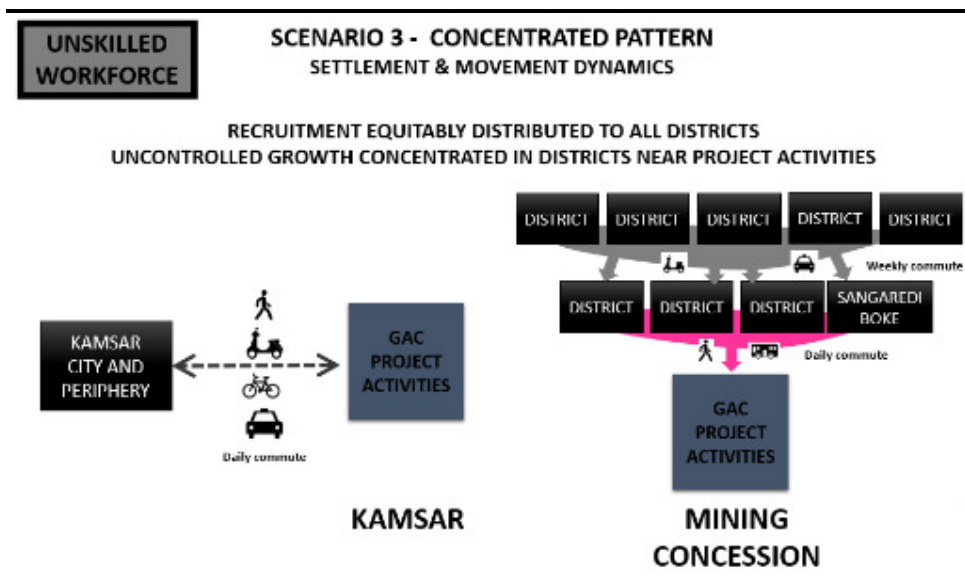
The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge in all eight districts adjacent to existing villages. Existing PIIM hotspots will increase in intensity, particularly in Tinguilinta and Béli Kindy Cité sectors, though much less so in this scenario than in Scenarios 1 and 3. Uncontrolled population increase will continue to occur in Kamsar.

Scenario 3 – Unskilled Workforce – Unplanned Concentrated Pattern

The key assumptions of Scenario 3 are:

- The unskilled Mine Area workforce will be recruited equally from the eight districts on the concession but those recruited from districts where a long daily commute is necessary will ignore the project’s preferred strategy of a dispersed pattern and seek to move – either permanently or temporarily during the working week, or semi-permanently for the duration of their contract - to more convenient commuting locations in Dambantian, Tanéné or Boulléré districts on the RN22 corridor; or to the cities of Sangarédi or Boké. It assumed that these workers will then return home at the end of the working period.
- The unskilled Port Area workforce will be recruited from Kamsar generally.
- On the concession, new unskilled workers from remote districts will commute daily to work by company bus, taxi pooling, car-pooling or motorcycle. The existing unskilled workforce will continue to walk from districts near project components (Dambantian and Tanéné) or the use the company bus from Sangarédi and Boké.
- In Kamsar, unskilled will continue to commute daily to work by a variety of transport modes.

Figure 3.15 Scenario 3 Infographic – Unskilled Workforce – Unplanned Concentrated Pattern



The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in the districts of Dambantian, Tanéné and Boulléré along the RN22 corridor and increase in intensity in existing PIIM hotspots in

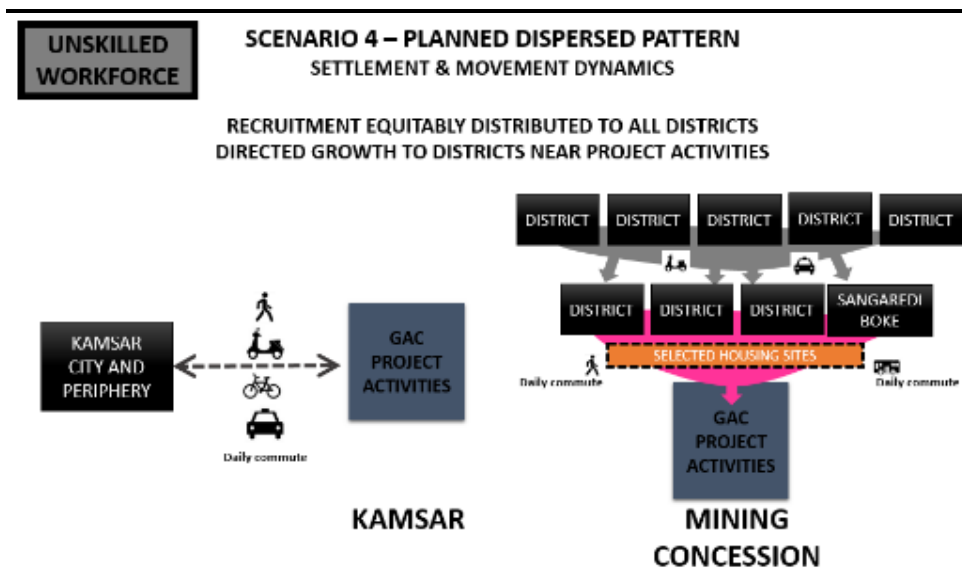
Tinguilinta and Béli Kindy Cité sectors. Uncontrolled population increase will continue to occur in Kamsar.

Scenario 4 – Unskilled Workforce – Planned Concentrated Pattern

The key assumptions of Scenario 4 are:

- The unskilled Mine Area workforce will be recruited equally from the eight districts on the concession but those recruited from districts where a long daily commute is necessary will be encouraged or directed to a planned site or camp selected in Dambantian, Tanéné or Boulléré districts on the RN22 corridor and developed by the Project or its contractors, which are convenient commuting locations.
- The unskilled Port Area workforce will be recruited from Kamsar generally.
- On the concession, new unskilled workers will commute daily to work by walking or company bus. The existing unskilled workforce will continue to walk from districts near project components (Dambantian and Tanéné) or the use the company bus from Sangarédi and Boké.
- In the Port Area, unskilled workers will continue to commute daily to work by a variety of transport modes.

Figure 3.16 Scenario 4 Infographic – Unskilled Workforce – Planned Concentrated Pattern



The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in the districts of Dambantian, Tanéné and Boullère, along the RN22 corridor and in Béli Kindy Cité sector. PIIM intensity will increase at the existing hotspots at in Tinguilinta. Uncontrolled population increase will continue to occur in Kamsar.

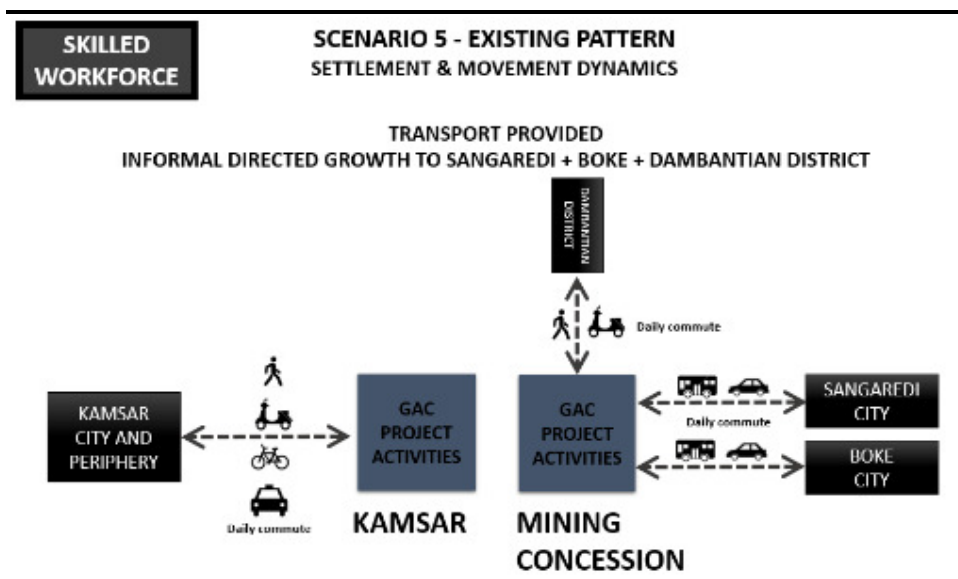
The next five scenarios are for the skilled workforce.

Scenario 5 – Skilled Workforce – Existing Pattern

The key assumptions of Scenario 5 are:

- The skilled Mine Area and Port Area workforce will be recruited nationally and will be provided with a housing and transport allowance. These workers would then find accommodation themselves in whichever location they choose. This scenario assumes that the existing pattern will be followed, that is, most of the new workers will choose to live primarily in the city of Sangarédi, though some may also elect to settle in the city of Boké where there are existing services and schools. A small minority may choose to live in districts near the project to minimise commuting or to accommodate an extended family. By continuing the existing housing and transport policy setting, the Project is informally directing growth to Sangarédi, Boké and Tinguilinta sector in Dambantian District.
- In the Mine Area, new and existing skilled workers will commute daily to work from Boké or Sangarédi by company bus or their own car. The new skilled workforce who choose to live locally would walk or use a motorcycle from districts near project components (Dambantian and Tanéné) or the use the company bus from Sangarédi and Boké;
- In the Port Area, the new and existing skilled workforce will commute daily to work by a variety of modes.

Figure 3.17 Scenario 5 Infographic – Skilled Workforce – Existing Pattern



The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in the districts of Dambantian and Tanéné, along the RN22 corridor and in Béli Kindy Cité sector. PIIM intensity will increase at the existing hotspots at in Tinguilinta. Uncontrolled population increase will continue to occur in Sangarédi, Boké and Kamsar.

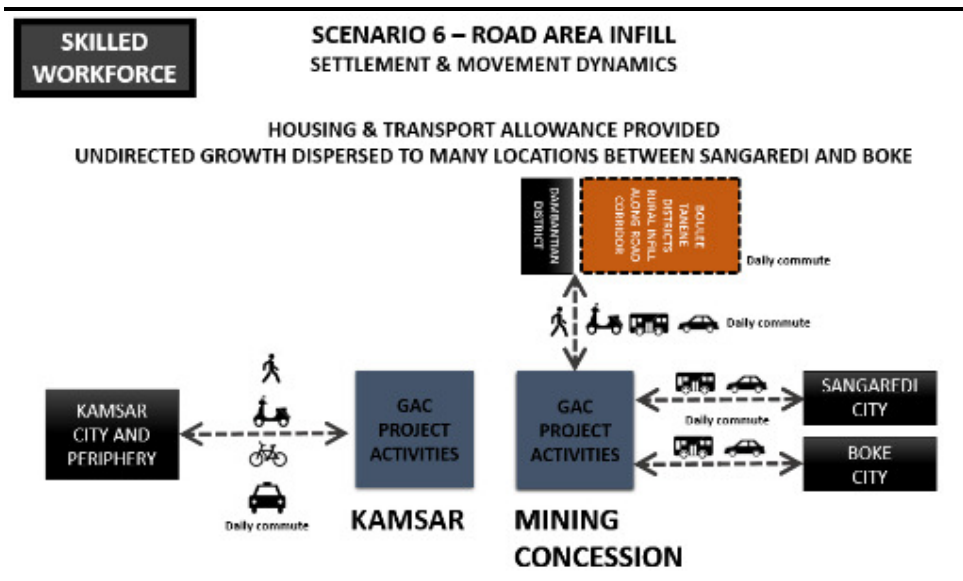
Scenario 6 – Skilled Workforce – Road Area Infill

The key assumptions of Scenario 6 are:

- That the skilled workforce will be recruited nationally and will be provided with a housing and transport allowance. These workers would then find accommodation themselves in whichever location they choose. This scenario assumes that new workers for the concession will choose to live either in the cities of Sangarédi or Boké where there are existing services and schools or to rent or build houses in Dambantian where they are some workers already. However, in this scenario is it envisaged that skilled workers will also seek to settle in other districts such as Boullère and Tanéné along the RN22 road corridor which are nearer the Project front gate at Béli Kindy Cité.
- In Kamsar, it is assumed that new workers would rent or buy from existing housing stock or seek to build a new house in a convenient location.
- On the Mine Area, new and existing skilled workers will commute daily to work from Boké or Sangarédi by company bus or their own car. The new skilled workforce who chooses to live locally would use a variety of transport modes or the join the company bus from Sangarédi and Boké.

- In Kamsar, the new and existing skilled workforce will commute daily to the Port Area by a variety of transport modes.

Figure 3.18 Scenario 6 Infographic – Skilled Workforce – Road Area Infill



The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in the districts of Dambantian, Tanéné and Boulléré, along the RN22 corridor and in Béli Kindy Cité sector. PIIM intensity will increase at the existing hotspots at in Tinguilinta. Uncontrolled population increase will continue to occur in the cities of Sangarédi, Boké and Kamsar.

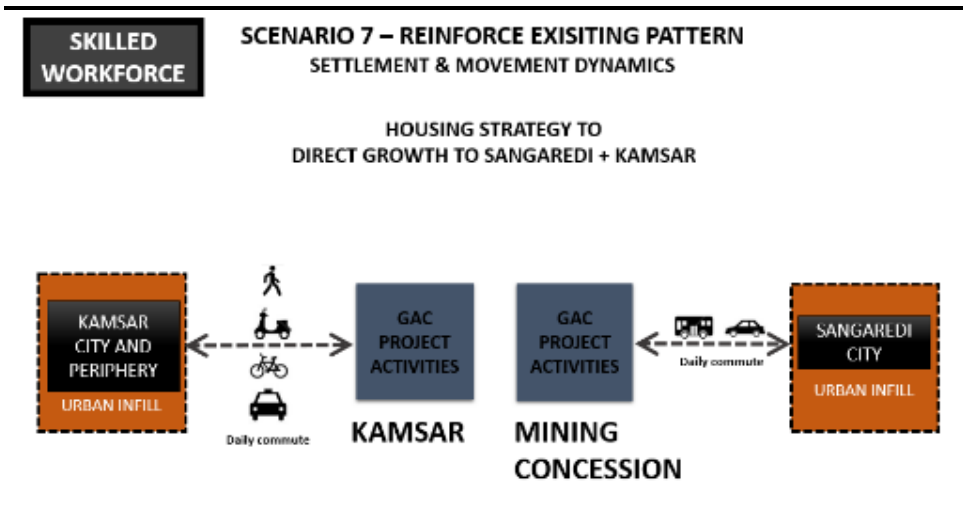
Scenario 7 – Skilled Workforce – Reinforce Existing Pattern

The key assumptions of Scenario 7 are:

- That the new skilled workforce will be recruited from outside the Mine Area and from Kamsar, and through a transport and infill housing strategy, will be directed to live in the cities of Sangarédi and Kamsar in order to reinforce the existing pattern (see Scenario 5 above). The company housing and transport strategy would facilitate this directed growth through a suite of arrangements including acquiring land, providing rental properties, or the initiating the construction of new housing by the Project, its contractors or by a third party entity on behalf of the Project in selected urban infill locations in Sangarédi and Kamsar.
- On the Mine Area, new and existing skilled workers will commute daily to work from Sangarédi by company bus or their own car. The new skilled workforce who choose not to live in Sangarédi would not be supported by company or its contractors housing or transport strategies.

- In Kamsar, the new and existing skilled workforce will commute daily to the Port Area by a variety of transport modes.

Figure 3.19 Scenario 7 Infographic – Skilled Workforce – Reinforce Existing Pattern



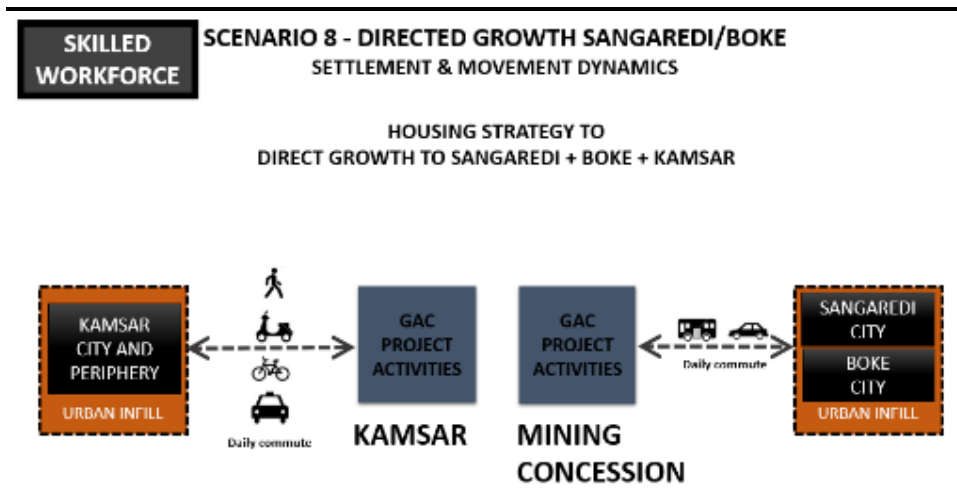
The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in areas in proximity to workforce housing.

Scenario 8 – Skilled Workforce – Directed Urbanised Growth

The key assumptions of Scenario 8 are:

- That the new skilled workforce will be recruited from outside the Mine Area and from Kamsar, and through a detailed housing and transport strategy will be directed to live in the existing urbanisations of Sangarédi and Kamsar. The company housing and transport strategy would facilitate this directed growth as per Scenario 7, but include Boké in order to direct growth to the regional capital and away from Sangarédi.
- On the Mine Area, new and existing skilled workers will commute daily to work from Sangarédi and Boké by company bus or their own car. The new skilled workforce who chooses not to live in these locations would not be supported by company housing or transport strategies.
- In Kamsar, the new and existing skilled workforce will commute daily to the Port Area by a variety of transport modes.

Figure 3.20 Scenario 8 Infographic – Skilled Workforce – Directed Urbanised Growth



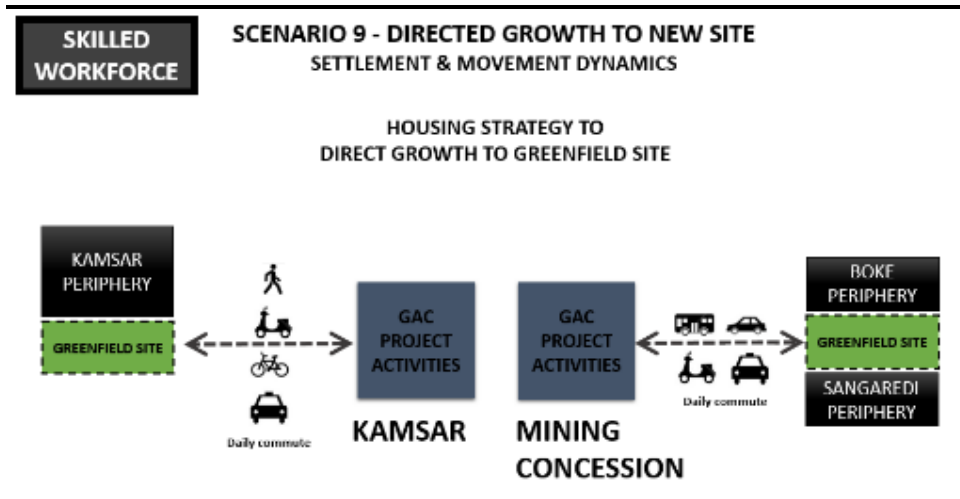
The predicted pattern of in-migration for this scenario is that uncontrolled population increase would continue to occur in Sangarédi, Boké and Kamsar.

Scenario 9 – Skilled Workforce – Directed Growth New Site

The key assumptions of Scenario 9 are:

- New skilled workforce will be directed to live in a new masterplanned housing development at a peri-urban greenfield site in Kamsar, Boké or Sangarédi facilitated by housing and transportation strategy.
- On the Mine Area, the existing skilled workforce will commute daily to work from Sangarédi and Boké, while new workers will commute from the new site by company bus or their own car. Newly employed skilled workforce who choose not to live in in the new site would not be supported by company housing or transport strategies. The existing workforce will also be given the opportunity to relocate to the new site.
- In Kamsar, the new and existing skilled workforce will commute daily to the Port Area by a variety of transport modes.

Figure 3.21 Scenario 9 Infographic – Skilled Workforce – Directed Growth to New Site



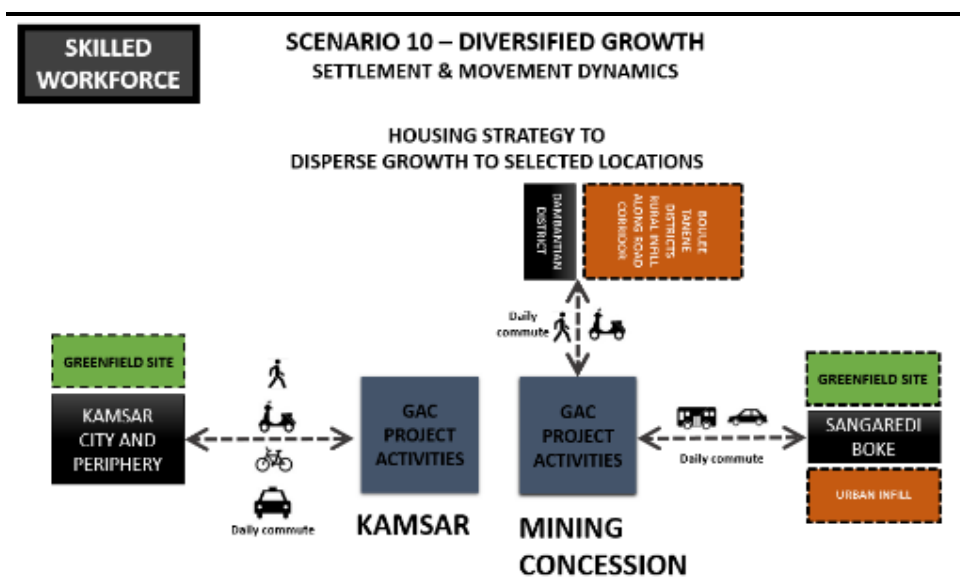
The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in areas in proximity to workforce housing developments.

Scenario 10 – Skilled Workforce – Diversified Growth

The key assumptions of Scenario 10 are:

- That the new skilled workforce will be recruited from outside the Mine Area and from Kamsar, and through a detailed housing strategy will be directed to live in new planned housing developments dispersed to many different locations and coordinated by a regional development strategy with a significant level of stakeholder buy-in. Facilitated by a company housing strategy, new workers would be located in selected locations in existing urbanisations, either infill or greenfield, or rural greenfield sites or camps through a suite of arrangements including renting, buying or the construction of new housing by the Project or its contractors or by a third party entity on behalf of the company.
- On the Mine Area, the existing skilled workforce will commute daily to work from Sangarédi and Boké, while new workers will commute from the new sites or camps by company bus or their own car. New skilled workforce who chooses not to live in these locations would not be supported by company housing or transport strategies. The existing workforce will also be given the opportunity to relocate to the new site.
- In Kamsar, the new and existing skilled workforce will commute daily to the Port Area by a variety of transport modes.

Figure 3.22 Scenario 10 Infographic – Skilled Workforce – Diversified Growth



The predicted pattern of in-migration for this scenario is that PIIM hotspots may emerge concentrated in areas in proximity to workforce housing developments.

3.4.6 Prediction of PIIM Hotspot Locations

The predicted hotspots where in-migrants will seek to settle will depend on which of the above development scenarios is implemented. However, based on the situational analysis of the PIIM pattern between 2006 and 2011, the hotspot locations would emerge as indicated in Table 3.7

Table 3.7 Predicted PIIM Hotspots

Development Scenario	PIIM Hotspot													
	Dambantian District	Tané District	Boulléré District	N'Daghara District	Kintao Daonta District	Balandougou District	Soucka District	Woussou District	Tinguilinta Sector	Béli Kindy Sector	Sangarédi	Boké	Kamsar	New Site
Unskilled Workers														
Scenario 1 – Existing Pattern	✗								✗		✗	✗	✗	
Scenario 2 – Planned Dispersed Pattern	✗	✗	✗	✗	✗	✗	✗	✗					✗	
Scenario 3 – Unplanned Concentrated Pattern	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	
Scenario 4 – Planned Concentrated Pattern	✗	✗	✗						✗	✗	✗	✗	✗	
Skilled Workers														
Scenario 5 – Existing Pattern									✗	✗	✗	✗	✗	
Scenario 6 – Road Area Infill	✗	✗	✗						✗	✗	✗	✗	✗	

Development Scenario	PIIM Hotspot													
	Dambantian District	Tanéne District	Boulléré District	N'Daghara District	Kintao Daonta District	Balandougou District	Soucka District	Woussou District	Tinguilinta Sector	Béli Kindy Sector	Sangarédi	Boké	Kamsar	New Site
Scenario 7 – Reinforce Existing Pattern											✗		✗	
Scenario 8 – Directed Urbanised Growth											✗	✗	✗	
Scenario 9 – Directed Growth to New Site													✗	✗
Scenario 10 – Diversified Growth	✗	✗	✗						✗	✗	✗	✗	✗	✗

✗High risk of emergence of PIIM hotspot

✗Low risk of emergence of PIIM hotspot

The precise location of each PIIM hotspots where in-migrants will seek to settle will depend on which of the above development scenarios is implemented. However, based on the situational analysis of the PIIM pattern between 2006 and 2011, they are likely to be:

- On the Mine Area in proximity to:
 - > the existing in-migration villages at Tinguilinta and Doubhi sectors;
 - > the proposed mining infrastructure area and haul road access points at Béli Kindy Cité;
 - > the proposed resettlement village at Béli Kindy Cité;
 - > along the RN22 corridor between Béli Kindy Cité and Doubhi sectors; and
- in Boké and Sangarédi; and
- Peri-urban greenfield sites.
- Dambantian, Tanéné and Boulléré districts along the RN22;
- Adjacent to remote district centres and villages in N'Daghara, Kintao Daonta, Balandougou, Soucka and Woussou Districts (scenarios 2 and 3 only);
- In Kamsar:
 - > In proximity to the proposed resettlement village for the displaced people near Filima;
 - > on the periphery of existing in-migration areas along the RN22 between Kassongony and Madina Boboff; and
 - > any unused or under-utilised land near the Port Area access road and boundaries; and
 - > Peri-urban greenfield sites.

The PIIM hotspot locations are illustrated in *FFigure 3.23 PIIM Hotspots, Southern Mine Area*

Figure 3.23 PIIM Hotspots, Southern Mine Area

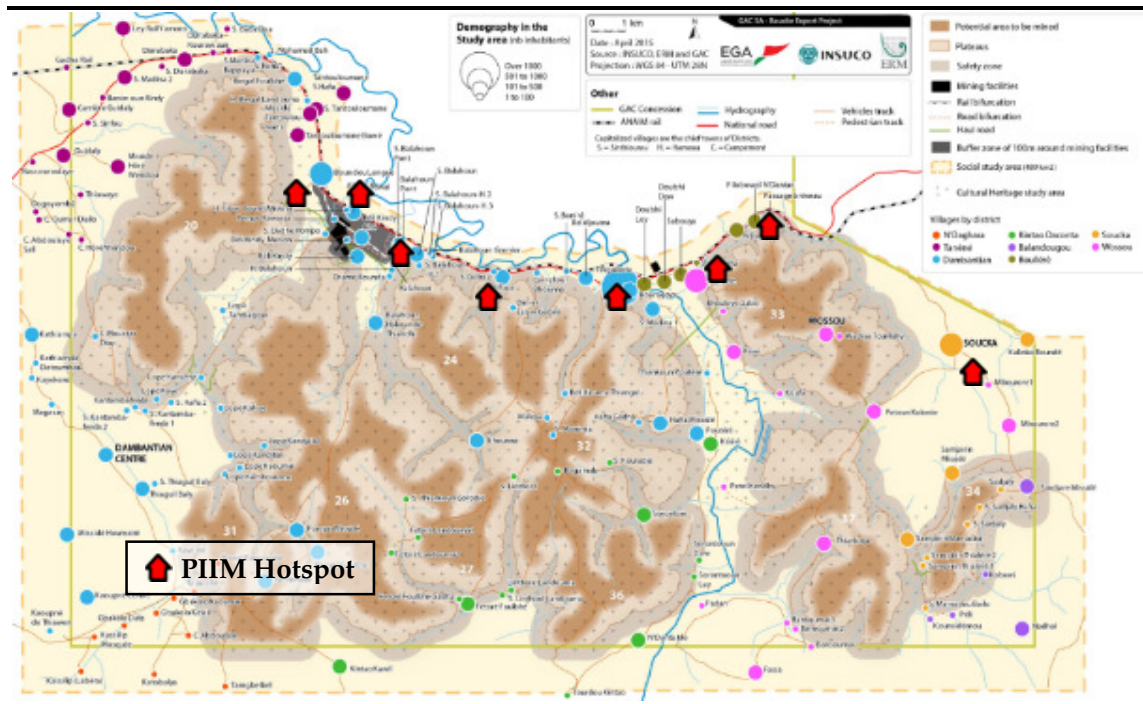


Figure 3.24 PIIM Hotspots, Kamsar & Port Area



3.4.7 Assessment of PIIM Hotspot Intensity

Error! Reference source not found. overleaf summarises an assessment of the each PIIM hotspot against the push/pull factors described in Section 3.2 and assigns a risk ranking against each factor as follows:

- **High:** the socio-economic, bio-physical or urbanisation push/pull factor is present at the location and is a major factor in triggering in-migration.
- **Medium:** the push/pull factor is present and triggers in-migration.
- **Low:** the push/pull factor is present to a limited degree but is not a major factor in triggering in-migration.

Table 3.8 Assessment of Push/Pull Factors at PIIM Hotspots

PIIM Hotspots PIIM Hotspot Push/Pull Factor ¹	Tinguilinta	Doubhi	Béli Kindy Cite	RN22	Boké	Sangarédi	Remote villages	Kamsar Filima Resettlement	Peri-urban Kamsar	Port Area
IFC1 - High level of local unemployment	High	High	High	High	High	High	High	High	High	High
IFC2 - Adjacent to direct and indirect construction phase with unskilled labour requirements	High	High	High	High	Low	Med	Low	Low	Low	High
IFC3 - Construction phase demand for goods and services by the project	High	High	High	High	Med	High	Low	Low	Low	High
IFC4 - Increase in access and/or availability of infrastructure, services and utilities.	Med	Med	High	Med	High	High	Low	Low	Low	High
IFC 5 - Increase in access and/or availability of resources for third parties (e.g., new roads)	Low	Low	High	Low	Low	Low	High	High	Low	Low
IFC 6 - Opportunities for land speculation associated with project development	High	High	High	High	High	High	Low	High	Low	Low
SA1 - Proximity to project components	High	High	High	High	Med	Med	Low	Med	Low	High
SA2 - Proximity to a major transport corridor	High	High	High	High	High	High	Low	Med	High	High
SA3 - Presence of urbanised areas near project activities with some basic level of services	High	High	High	High	High	High	Low	Med	Med	High
SA4 - Proximity to project-induced in-migration populations	High	High	High	High	High	High	Low	High	High	High
SA5 - Availability of unused or under-utilised land for informal settlement	High	High	High	High	Low	Low	High	Med	Med	Low
SA6 - Availability of land for subsistence livelihood activities	High	High	High	High	Low	Low	High	Med	Low	Low
SA7 - Community development and investment in health, education and water supply	High	High	High	High	Low	Low	Med	High	Low	Low

Legend

- High – Hotspot Location meets criteria for a high risk hotspot
- Medium – Location meets criteria for medium risk hotspot
- Low – Location meets criteria for low-risk hotspot

¹ Extracted from on IFC Handbook for Addressing Project Induced In-migration and based on site analysis and fieldwork.

Figure 3.25 illustrates each site assessment's ranking against each pull/push factor listed in Table 3.8 as a radar array chart and graphically compares all site assessments indicating which of the push/pull factors have the most significant influence.

Each push/pull factor in Table 3.8 is identified in Figure 3.25 by:

- **IFC(number)** – the factor is based on IFC's handbook for addressing PIIM
- **SA(number)** - the factor is based on Site Assessment conducted in mid-2016.

The area of each site's radar array graphically indicates the number of "high", "medium" or "low" rankings. The larger the area of the radar indicates that it has more "high" risk rankings.

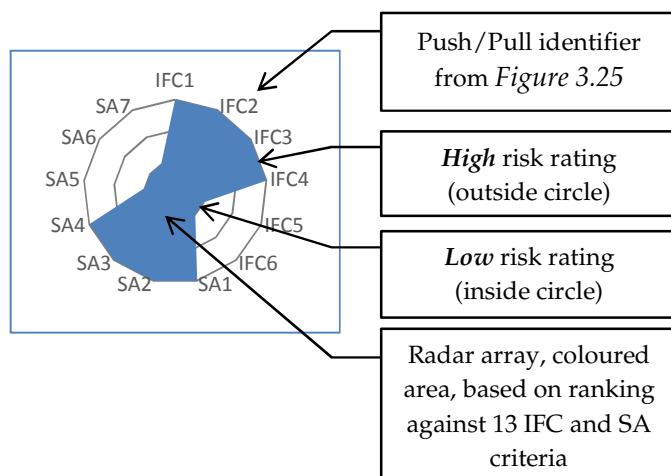
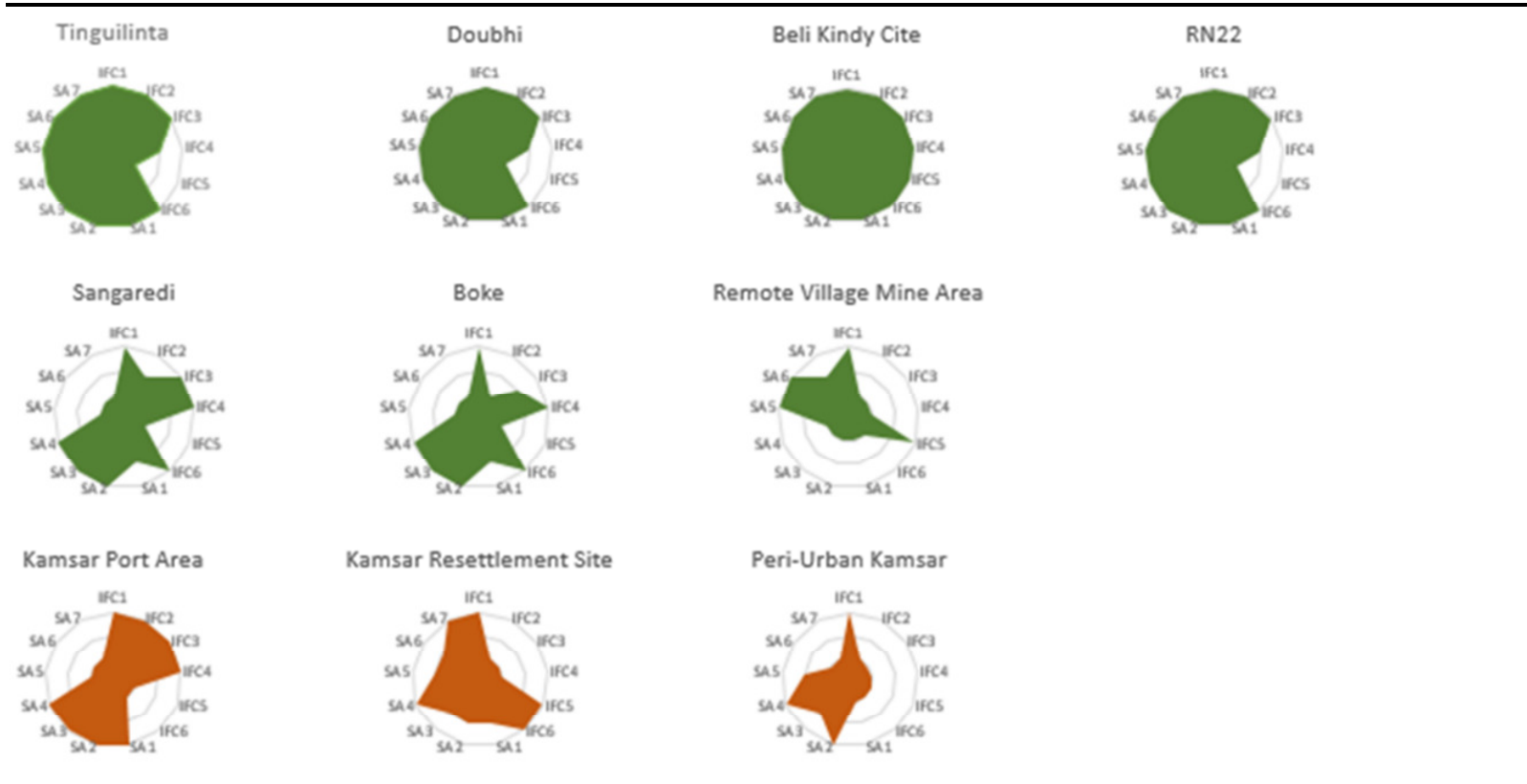


Figure 3.25 shows that Béli Kindy Cité, Tinguilinta, Doubhi and the RN22 are the highest risk PIIM hotspots on the Mine Area, followed by Sangarédi and Boké. The remote villages on the Mine Area are low-risk hotspots. In Kamsar, the resettlement site and peri-urban areas are high risk, while the Port Area is lower risk.

Figure 3.25 Infographic – Comparison of Push/Pull Factor Assessment of PIIM Hotspots



3.4.8 *Preferred Development Scenario*

At present, it is not possible to determine which of the development scenarios is the preferred one and therefore the pattern and intensity of PIIM hotspots is indicative only. The preferred development scenario, which will influence the pattern and intensity of PIIM significantly, will be determined through an internal Project risk/benefit analysis, an external multi-stakeholder regional development planning process as described in *Section 5* and on-going monitoring of in-migration during the Project lifecycle.

4.1 STRUCTURE OF THIS SECTION

This section describes:

- the lessons learned from case studies of similar projects on how in-migration was managed that have been embedded into the measures and actions;
- the viewpoints of stakeholders that have been integrated into the PIIMS;
- the measures and actions that will need to be taken to manage in-migration in the short-term assuming a number of Project configurations and development scenarios;
- how the PIIMS will be implemented, monitored, evaluated and funded.

4.2 LESSONS LEARNED FROM CASE STUDIES**4.2.1 General**

A number of case studies were researched on how mining projects in similar contexts managed in-migration. Interviews were undertaken with Project staff deployed at the projects in order to identify key success factors and lessons learned in managing in-migration. These are summarised in *Table 4.1*.

Table 4.1 Lesson Learned From Case Studies

<i>Case Study</i>	<i>Risks & Issues</i>	<i>Success Factors and Lessons Learned</i>
<p>Tangguh Liquefied Natural Gas Project, West Papua, Indonesia</p>	<ul style="list-style-type: none"> ● High expectations of a successful project from local and national government, NGOs and local community. ● Potential for conflict from both local communities and armed state forces. ● Remote location (only accessible via boat/ferry) without access to reticulated water supply or sewerage treatment. ● An area with sensitive flora and fauna species were found that had not been previously discovered. 	<ul style="list-style-type: none"> ● No significant controversy experienced to date. ● The project was a catalyst for the Diversified Growth Strategy (DGS) now adopted by the Government and UNDP comprising: <ul style="list-style-type: none"> > ensuring that the region derived benefits from the Project; > mitigated growth of in-migration in areas without the capacity to assimilate; > pro-actively managed in-migration by ensuring that the project’s “multiplier effects” were directed away from the project area at locations with the capacity to accommodate the resulting growth; > program implemented to strengthen business capacity of local small to medium enterprises (SMEs) to provide goods and services to the project. ● The project owner implemented a public engagement strategy of widespread “engagement, transparency, adoption of international standards and integration of social and environmental management.”
<p>Kirkvine and Ewarton Aluminium Mines, Jamaica</p>	<ul style="list-style-type: none"> ● Refinery was built within 5km of the town of Mandeville which has existed since early 19th century ● Some local community housing was very close to mining activities. ● Influx of Jamaican residents returning from abroad in hope of employment. ● Weak land use control lead to in-migrants settling on periphery of exiting settlements and sterilizing bauxite reserves. ● In-migrants settled or near on top of bauxite in the hope to be resettled. ● There was a significant increase in crime after mine closure. 	<ul style="list-style-type: none"> ● It was important to clearly designate resource boundaries and strongly discourage informal settlement as soon as it happens – rapid response to in-migrant settlement is of paramount importance. ● Agricultural program and landscape rehabilitation program was aimed at improving agricultural practices and mine areas were leased to local farmers to increase food production. ● Community control of in-migration via properly constituted associations are a key strategy and these need to be resourced at the local level by royalty income from central government. ● Land use planning is essential to avoid the above by informing in-migrants that land is being used or has been zoned for a use

<i>Case Study</i>	<i>Risks & Issues</i>	<i>Success Factors and Lessons Learned</i>
		<p>and therefore cannot be settled on – this was a very effective tool.</p> <ul style="list-style-type: none"> • Buffer areas intended to restrict in-migration settlement should be used for the benefit of local communities
Alumina Refinery, Mozambique MOZAL	<ul style="list-style-type: none"> • Weak legal, financial & political institutions, government and community capacity after protracted civil war. • Poorly developed existing infrastructure – roads, water, sewerage and waste. • Limited employee access to housing. • All suitable development sites were occupied by concentrations of medium to large informal settlement communities. • Inefficient, bureaucratic public services. • Prevalence of HIV/AIDS, Malaria and other health risks. • Low levels education, skills and training in local workforce. 	<ul style="list-style-type: none"> • Completed on schedule and under budget despite challenging political and socio-economic environment. • Developed strategies to mitigate political and community risks early in project development process. • Formed a Community Development Trust which operated under four principles – <ul style="list-style-type: none"> > aligned development initiative with national, provincial & local governments; > acted as a catalyst & facilitator in establishing pilot projects that could be replicated; > formed partnerships with stakeholders to achieve sustainable results; > involved relevant stakeholders from all levels of government, non-government organisations, communities, private sector and project employees.
Jwaneng Diamond Mine, Botswana	<ul style="list-style-type: none"> • The existing town did not have the infrastructure or facilities to cope with the additional housing required for the mine expansion or in-migrants. Their previous policy settings of providing housing, bus services, recreation and sports facilities free of charge to employees and local communities was not economically sustainable and attracted an influx of 2,000 people. 	<ul style="list-style-type: none"> • The project owners built a strong relationship with the government at all levels in Botswana and retained long term government support even after the policy settings were revised to remove free of charge services to discourage influx and implement a user-pays system.
Grasberg Copper and Gold Mine, West Papua, Indonesia	<ul style="list-style-type: none"> • The conflict between West Papuans and the Indonesian government posed significant challenges for the mining operational activities. The West Papuans felt that the government had let them down and that there has been no direct benefit to them as a result of the mining operations. The mine was a symbol of unwelcome Indonesian rule. 	<ul style="list-style-type: none"> • The project owners eventually overcame significant political insecurities through its community engagement style and approach and eventually gained local community support, however the time, cost and resources needed to do so would have been significantly lower if this approach had been implemented from commencement.

<i>Case Study</i>	<i>Risks & Issues</i>	<i>Success Factors and Lessons Learned</i>
	<ul style="list-style-type: none"> • Community perceptions of the company were very negative as a result of previous social, human right and environmental problems. • The local workforce had a very low level of skill. • The security of the mine site and its employees was and remains a significant issue (as of 2012). • Uncontrolled artisanal miners operate within the mine site. • Land rights of existing communities were a significant problem. • Environmental complaints regarding waterway sedimentation was a significant problem. 	<ul style="list-style-type: none"> • The more adverse effects of political and social risks are not inevitable through an early stakeholder engagement planning leading to a coordinated response. However, once occurred, as in all other environmental and social catastrophes, options may be limited to reverse those and not without substantial economic and reputational loss. • A positive relationship needed to be formed with the local community from the very beginning and appropriate environmental auditing undertaken and mitigation measures put in place with a sense of urgency.

Summary of Lessons Learned and Success Factors

Key lessons learned and success factors are as follows:

- Form a community development approach which aligns development initiative with national, provincial & local governments intentions; acts as a catalyst and facilitator in establishing pilot projects that can be replicated; forms partnerships with stakeholders to achieve sustainable results.
- Implement a diversified growth strategy that is adopted, coordinated and promoted by government and ensuring that the region derive benefits from the Project and strategy.
- Build a strong relationship with the government at all levels to mitigate the negative impacts of Project policy resettlements on local communities.
- Pro-actively manage in-migration by ensuring that the project's "multiplier effects" are directed away from the project area to locations with the capacity to accommodate the resulting growth.
- Clearly designate resource boundaries and strongly and rapidly discourage informal settlement through specific approaches including dedicated communications to stakeholders, as well as (if appropriate) site access restriction policies.
- Implement an agricultural program and landscape rehabilitation program in buffer zones aimed at increasing food production for local host communities.
- Facilitate community control of in-migration via properly constituted associations and resourced at the local level initially by the Project and then subsequently by royalty income from central government.
- In collaboration with local authorities, implement land use planning and enforcement processes by informing in-migrants that land is being used or has been zoned for a use and therefore cannot be settled on.
- Implemented a well communicated strategy of widespread "engagement, transparency, adoption of international standards and integration of social and environmental management."
- Implement program to strengthen business capacity of local small to medium enterprises (SMEs) to provide goods and services to the Project.
- PIIMs needs to be developed and implemented from an early stage of the Project. In various cases, the project owners eventually overcame significant political insecurities through its community engagement style and approach and eventually gained local community support, however

the time, cost and resources needed to do so would have been significantly lower if this approach had been implemented from commencement.

- Form a positive relationship with the local community from the very beginning and ensure appropriate environmental and social mitigation measures are put in place with a sense of urgency.

4.3 STAKEHOLDER VIEWPOINTS

A number of stakeholder engagements were undertaken and where relevant the viewpoints received and incorporated into the PIIMS. Table 4.2 summarises their comments and the resulting GAC actions.

Table 4.2 Summary of Stakeholder Viewpoints

<i>Stakeholder</i>	<i>Viewpoint</i>	<i>GAC Action</i>
Strategy & Development Group - Ministry of Mines, Conakry	<ul style="list-style-type: none"> • Regional development should be focused between Kamsar, Boké and Sangaredi 	<ul style="list-style-type: none"> • Agreed, but will be addressed through participation in a regional development and planning study to be undertaken by Ministry of Mines and financed by the World Bank (see PIIM13 Regional Development and Planning Strategy below).
Boké Préfecture - Prefect's Office	<ul style="list-style-type: none"> • GAC must manage PIIM on concession 	<ul style="list-style-type: none"> • Agreed. Efforts will be focused on the road corridor.
	<ul style="list-style-type: none"> • GAC must manage PIIM in Boké 	<ul style="list-style-type: none"> • Not agreed. Management of PIIM outside the concession can only be achieved through collaborative efforts with all actors in the Boké mining sector.
	<ul style="list-style-type: none"> • GAC should support local enterprises 	<ul style="list-style-type: none"> • Agreed, will be addressed through the PIIMS and the community investment strategy (See PIIM7 Procurement of Goods and Services below).
	<ul style="list-style-type: none"> • GAC should support urban development in Boke 	<ul style="list-style-type: none"> • Agreed, but will be addressed through participation in a regional development and planning study (see PIIM13)
	<ul style="list-style-type: none"> • Regional development should be focused between Kamsar, Boké and Sangaredi 	<ul style="list-style-type: none"> • Agreed, but will be addressed through participation in a regional development and planning study (see PIIM13).
Boké Préfecture - Direction Préfectorale de l'Urbanisme, Habitat et Construction.	<ul style="list-style-type: none"> • Provide facilities outside the mining areas to contain the migratory flow. 	<ul style="list-style-type: none"> • Agreed, but will be addressed through participation in a regional development and planning study. Management of PIIM outside the concession can only be achieved through collaborative efforts with all actors in the Boké mining sector (see PIIM13).
	<ul style="list-style-type: none"> • Take into account the master plan of urbanization under revision for towns closest to mining sites (Boké, 	<ul style="list-style-type: none"> • Ditto

<i>Stakeholder</i>	<i>Viewpoint</i>	<i>GAC Action</i>
	Sangaredi, Kamsar, Tanéné). <ul style="list-style-type: none"> Take into account the problem of employment which is the main factor that pushes people for a short time to go illegally occupy land in the concession. 	Agreed, measures included in the PIIMS (see PIIM4 Community Investment Strategy, PIIM7 Labour Procurement and PIIM9 Procurement of Goods and Services).
	<ul style="list-style-type: none"> Take appropriate measures to prevent people who have already resettled elsewhere from returning illegally to occupy the site through agricultural and dwelling activities. 	Agreed, measures included in the PIIMS (see PIIM1 PIIM Committees, PIIM2 Land Use Planning, PIIM3 Buffer Zone Management and PIIM12 Management of Social Dynamics below).
	<ul style="list-style-type: none"> Any land use planning along the road corridor to manage PIIM can be validated by the Directorate and sent to Conakry for incorporation into the regional development plan. 	Agreed, measures included in the PIIMS (see PIIM2 Land Use Planning below).
District Presidents	Unskilled labour should be procured from affected communities	Agreed, measures included in PIIMS (see PIIM6 Communication and Sensitisation and PIIM7 Labour Procurement below).
Ministry of Public Works, Conakry	Regional development should be focused between Kamsar, Boké and Sangaredi	Agreed, but will be addressed through participation in a regional development and planning study (see PIIM13).

4.4 PRINCIPLES OF PIIM STRATEGY

The PIIM Strategy is based on three principles.

- Firstly, the lessons learned and key success factors extracted from the case studies should be embedded in the PIIMS.
- Secondly, that the push and pull factors influencing project induced in-migrants between 2006 and 2011 (see *Section 3.2.4*) will be the same in 2016:
 - > *Socio-economic push factors*: high levels of national and regional poverty and unemployment in Guinea and adjacent ECOWAS countries, combined with high levels of national and regional subsistence livelihood activities across the region will push international, national and regional in-migrants to the Project Mine and Port Area.
 - > *Socio-economic pull factors*: recruitment of skilled and unskilled labour for the project construction for direct by the project or indirectly through employment with companies that supply goods and services to the Project.
 - > *Bio-physical pull factors*: the construction of access roads across the Mine Area will significantly increase access to unused and/or underutilised land for settlement, agricultural and hunting activities (including to areas which meet IFC criteria for definition as critical habitat).

- > *Built environment, infrastructure and services provision pull factors:* The combination of the presence of existing urbanisations with basic services, project community development activities (such as construction of health posts, schools, wells and markets) and existing in-migration populations all in proximity to a major transport corridor.
- Thirdly, that recruitment, workforce accommodation and transportation and community development policy settings can be adjusted to facilitate management of in-migration and are therefore will be important levers at the Project's disposal to pro-actively and effectively manage in-migration (see *Section 3*).

4.5 *PIIM MEASURES AND ACTIONS*

4.5.1 *PIIM Measure 1 (PIMM1) – Mine Area Community PIIM Committees*

Objective

The Project shall facilitate the implementation of multi-stakeholder, district-level PIIM committees in identified in-migration hotspots on the Mine Area before the start of construction. The PIIM committees shall be comprised of key community groups, including the sector chiefs, community residents including women, youth and ethnic minorities groups and other local stakeholders such as civil society. The general purpose of the PIIM Committees will be to plan and contribute to PIIM management in their district, to monitor PIIM and to assist the Project in implementing PIIM measures and actions.

Actions

- PIIM1.1: The Project will facilitate the setting up of the Community PIIM Committees through open and transparent selection systems based on a pre-defined quota agreed with prefectural authorities.
- PIIM1.2: The Project will provide initial financial support in order to facilitate the operations of the Committees until the support can be transitioned to government authorities. The Project will facilitate the capacity-building of PIIM Committees to assist in sensitizing their community members about the risks and challenges associated with PIIM, and with inducting migrants to village rules.
- PIIM1.3: The Project will facilitate the ability of PIIM committees to consult with the wider community through community consultations forums and advance proposals for specific issues relevant to the district including infrastructure, services, utilities, business capacity building, economic development, community relations and cohesion, economic development, law and order, and others as deemed necessary.

4.5.2 *PIIM2 - Land Use Planning and Zoning*

Objective

The Project shall facilitate a land use planning and zoning exercise at potential PIIM hotspot locations so that in-migrants can be discouraged from informal settlement on land by informing them that all land has been designated for specific community purposes.

Actions

- PIIM2.1: The Project will deploy economic development and planning resources, who will collaborate with relevant technical services, local authorities and the relevant Community PIIM Committee to conduct a participatory mapping of community assets. The Project will then facilitate, in a participatory fashion, the development of a land use zoning plan that will:
 - > stipulate desired future uses of community lands and describe the intended land use of clearly designated zones (for example: residential, agricultural uses, designated areas for in-migration settlements, etc.);
 - > stipulate the desired provision of social infrastructure and levels of services and utilities;
 - > conserve the natural resources and protect critical habitat in particular;
 - > identify land appropriate for increased agricultural activities and food production; and
 - > inform the District Presidents and Sector Chiefs of the land use zoning plan and its intended function and to help them guide in-migrants to areas designated for new settlement.

4.5.3 *PIIM3 - Designation of PIIM No-Go Buffer Zones*

Objectives

- The Project shall facilitate the land use of designated buffer zones between mining areas and adjacent communities and in-migrants will be discouraged from settling in these areas by informing them that the community has designated uses for this land.
- The Project shall facilitate the use of buffer zones for increased agricultural, pastoral and livelihood activities.

Actions

- PIIM3.1: The Project will facilitate the clear designation and mapping of all land within Project buffer zones which is likely to attract PIIM settlement in a participatory fashion with district and sector leadership and the closest PIIM committee. The PIIM committee will be responsible for informing in-migrants on arrival of the intended uses of the buffer zones. The PIIM Committee and the Project will liaise with law and order authorities to ensure that in-migrants are directed to areas designated for in-migration settlement.
- PIIM3.2: The Project will facilitate, in a participatory fashion with local communities and local authorities, the desired future uses of buffer zones by the community and describe the intended uses for increased agricultural, pastoral and livelihood activities.
- PIIM3.3: The Project will undertake regular monitoring of buffer zones (see *Section 4.6*) and inform the Prefectural authorities and local PIIM in-migration committees of emerging PIIM issues for follow-up action.

4.5.4 *PIIM4 - Community Investment and Development*

Objective

The Project shall facilitate the development of a participatory Community Investment Strategy (CIS) supporting planning, economic and infrastructure development over the Project lifecycle, which focus on:

- managing social dynamics;
- provision of infrastructure, services and utilities
- improving local economy and livelihood
- improving health standards

Actions

- PIIM4.1: The Project will invest in economic development projects sufficiently remote from Project areas to act as alternate pull-factors for in-migrants and discourage in-migration settlement in the Mine and Port Area.
- PIIM4.2: The Project will invest in infrastructure, services and utilities in or near emerging hotspots to ensure adequate capacity to meet the increased demand and reduce pressures in existing communities.
- PIIM4.3: The precise spatial pattern for investment will be determined by the Project's regional development and planning strategy (see *PIIM 13*).

4.5.5 **PIIM5 - Local Capacity Building for PIIM Management**

Objective

The Project shall facilitate capacity building at a prefectural level to monitor and manage in-migration within and outside the Mine and Port Areas.

Actions

- PIIM5.1: The Project, in collaboration with the Boké Prefecture, the Prefectural Department of Mines and Geology, the Prefectural Directorate for Urban Planning, Housing and Construction (*Direction Préfectorale de l'Urbanisme, Habitat et Construction*) and the Guinean Land Registry (*Bureau de la Conservation Foncière*), will:
 - > develop a capacity building program for the district presidents and sector chiefs on the required procedures for allocating land to existing communities and in-migrants within the GAC Mine Area;
 - > develop a formal procedure for informing the District President and Sous-Prefects, and Guinean Land registry office of all new land allocations;
 - > Prioritise protection and conservation of critical habitat, soil, natural resources, common land, etc.
- PIIM5.2: The Project develop a capacity building program for the Land Registry or alternate designated technical service to monitor in-migration population within the Mine Area.

4.5.6 **PIIM6 - Communication and Sensitization**

Objective

- The Project shall discourage the arrival of opportunistic and unskilled in-migrants looking for employment by communicating its local employment policy at national and regional levels throughout construction phase.
- The Project shall discourage local communities from encouraging extended family members and relatives from outside the region to relocate to the Project Area by regular communication through PIIM Committees of the local employment policy.
- The Project shall inform the communities of the benefits and risks of potential PIIM impacts and about the measures available to mitigate these impacts.

Actions

- PIIM6.1: The Project will develop a communications programme to inform widely on the rules and procedures for recruitment and employment with the Project through a wide variety of media, including but not limited to newspapers, radio broadcasts and local Project offices. Specifically, the Project will communicate that:
 - > Project-Affected People (PAPs) will be prioritised over other residents and in-migrants for unskilled employment;
 - > for skilled employment, PAPs with equal skill and experience will be prioritized over other residents and in-migrants; and others for all roles;
 - > applications for employment will only be accepted at designated recruitment centres or designated employment agencies in Conakry, Boké, Sangarédi and Kamsar for skilled labour, through District Presidents in the Mine Area for unskilled labour and at designated recruitment centres in Kamsar for unskilled labour.

- PIIM6.2: The Project will undertake a sensitization campaign to inform local communities in proximity to Mine Area hotspots about environmental conservation, health and safety, risks associated with and measures to be taken to manage in-migration.

4.5.7 *PIIM7 - Labour Procurement through Contractors*

Objective

The Project shall stipulate the priority of local procurement of labour over in-migrants by contractors to discourage expectations by in-migrants of employment by local enterprises.

Action

- PIIM7.1: The Project will embed conditions in the contracts of the suppliers of services to abide by its policies with regard to local recruitment, employment and code of conduct, in particular, the following requirements:
 - > contractors shall be responsible for providing safe and adequate accommodation and transport for skilled and unskilled workers recruited from outside of the local community;
 - > contractor personnel employed on the Project sites shall not be permitted to establish unplanned or informal camps or dwellings within the Mine Area for either themselves or supported family members. The Contractor shall be responsible for enforcing this requirement with their personnel. The Project will monitor the Mine Area to ensure no unauthorised settlement occurs;

- > Contractor workforces shall abide by the GAC code of conduct for employment.

4.5.8 PIIM8 - Reinforcing Law and Order

Objective

The Project shall manage the interface with the project activities and local communities in order to reduce the potential for social tension, conflicts and disputes and increased levels of crime and violence and road accidents resulting from project activities.

Actions

- PIIM8.1: The Project will develop a Community Health, Safety and Security Management Plan (CHSSMP), in accordance with ESMP Section 18.6.9 with the following provisions:
 - > ensuring a regular two-way exchange of security related information reports between the Project and local law enforcement;
 - > monitoring of the in-migration situation; and
 - > implementation of capacity building and/or other forms of support for local law enforcement should in-migration related security issues cross identified thresholds (see PIIM5) including training in the Voluntary Principles on Security and Human Rights.
- PIIM 8.2: The Project will also fully implement the measures with regard to a decrease in general security in *Section 15.3.2.8 of the Social Impact Assessment*.

4.5.9 PIIM9 - Procurement of Goods and Services

Objective

The Project shall facilitate the increased accessibility to existing markets and the opening of new markets for local products and services, increase local skills base, to improve opportunities for local businesses to employ in-migrants with capital and skills so that they contribute positively to the local economy.

Action

- PIIM9.1: The Project will implement the local procurement of goods and services, as committed to and detailed in its Social Impacts Mitigation and

Enhancement Plan (SEMP 18.4) and Local Development Plan (SEMP, 18.7.3). In particular, the preferential hiring and sourcing plan will:

- > focus on identifying and building the capacity of local entrepreneurs over attracting new entrepreneurs to the Mine or Port Area and making them competitive in a new business environment;
- > include measures to assist local entrepreneurs identify, access and sell to alternative markets; and
- > reinforce the preferred regional development and planning strategy (see PIIM 13) by concentrating local procurement in preferred centres.

4.5.10 *PIIM10 – Managing Negative PIIM-Related Environmental Impacts*

Objective

The Project shall facilitate the implementation of measures to prevent the loss of biodiversity and critical habitat, the degradation of land use and soil productivity and the increased pressure on land use and common natural resources.

Action

PIIM10.1: The Project, in collaboration with local host communities, government technical services and civil society, especially in emerging PIIM hotspots, will facilitate the identification of potential solutions to environmental issues that could be funded through the Project CIS or by other financial entities, for example:

- introduction of alternative technologies for energy and fuel consumption to reduce overexploitation of natural resources, particularly slash-and-burn agriculture, charcoal production and bushmeat hunting in habitats recognised as critical habitat in the Mine Area;
- Implementation of GAC Biodiversity Action Plan to mitigate and where relevant offset Project-induced impacts on sensitive habitats and biodiversity values; and
- introduce improved agricultural practices to significantly improve yield.

4.5.11 *PIIM11 – Managing PIIM-Related Negative Social Dynamics*

Objectives

The Project shall facilitate the implementation of measures to mitigate negative social dynamics associated with in-migration, including aspects relative to:

- the loss of soil productivity and increased pressure on natural resources;
- increased pressure on access to land for housing, food, and fuel;
- access to social infrastructure, services and utilities;
- increased economic dependence and vulnerability; and
- health issues.

Actions

The Project has developed a Social and Environmental Management Plan (SEMP) comprised of the following social management plans of relevance to in-migration:

- Code of Conduct (CC);
- Local Development Plan (LDP);
- Community Investment Strategy (CIS);
- Cultural Heritage Management Plan(CHMP);
- Stakeholder Engagement Plan (SEP);
- Grievance Mechanism and Resolution Plan (GMRP).

In implementing the SEM, the Project shall:

- PIIM11.1: require that subcontractors follow the CC in local communities;
- PIIM11.2: as part of the CIS, supplement the recommendations of SEM Table 18.3 Social Impacts Mitigation and Enhancement Plan with the following elaboration:
 - > implement an awareness program by specialized local or national NGOs to alert the community to the issues associated with prostitution and other risky behaviour (STDs), teenage and/or unwanted pregnancies, consumption of alcohol and drugs, etc. as a potential result of in-migration.
- PIIM11.3: maintain the SEP as a live document, incorporating all newly arrived in-migrants who settle in the Mine Area. The SEP should permit rapid identification of new or emerging negative in-migrant related social issues to the Project so that measures to resolve rapidly emerging problems can be agreed and implemented with PIIM Committees; and
- PIIM11.4: with regard to the GMRP, communicate to all communities that anyone, including in-migrants, may register a grievance with regard to in-migration issues with the PIIM Committees so that measures to resolve rapidly emerging problems can be agreed and implemented.

4.5.12

PIMM12 – Managing PIIM-Related Negative Health Impacts

Objective

The Project shall implement measures to mitigate the emergence of negative health impacts related to Project-induced in-migration, in particular the potential proliferation of communicable diseases and STIs related to mixing and transactional sex, the increase in road accidents, and the increased pressure on health services.

Actions

- PIIM12.1 The Project will incorporate PIIM-specific measures to its *Community Health, Safety and Security Plan* to address in-migration related health risks.

The CHSSP will employ an Environmental Health Areas (EHAs) framework for analysing project-triggered health impacts which will include specific in-migration related measures such as the establishment of a community health monitoring programme and sensitization to in-migration related health risks, potential support to the upgrading of community health facilities (through the community investment strategy), as well as capacity building of health professionals on major in-migration related health risks, management of communicable diseases, etc.

- PIIM12.2: The Project will undertake a full assessment of health facilities in identified in-migration hotspots in order to inform Regional Development Planning (see *PIIM13*).

4.5.13 *PIMM13 – Regional Development and Planning Strategy*

The Project shall initiate and participate in the the development of a diversified regional development and planning strategy that is adopted and implemented by government and ensuring that the region derives benefits from the Project.

This measure is discussed in detail in *Section 5*. In summary, a regional development and planning strategy will be formulated through multi-stakeholder discussions and through the support and involvement of the Government. This will progressively develop and put in place a regional land-use and socio-economic development plan, and an investment framework for infrastructure and service provision. The investment framework will identify costs and likely sources of funding, identifying those which the Project is best-placed to support, and those which will be supported by other stakeholders, including other investors in the region, and international donors. The approach is participatory and inclusive, and will consider the long-term sustainability of interventions. The regional development plan will be underpinned by support to build the governance, management and operational capacity of the prefectural Government.

4.6

MITIGATION OF PIIM PREDICTED IMPACTS

Table 4.3 lists the predicted impacts identified in *Section 3.5* and the PIIM measure that is intended to manage each.

Table 4.3 Mitigation of Predicted Impacts

PIIM IMPACT	PIIM MEASURE												
	PIIM1 – Community PIIM Committees	PIIM2 - Land Use Planning and Zoning	PIIM3 - Designation of PIIM No-Go Buffer Zones	PIIM4 - Community Investment and Development	PIIM5 - Local Capacity Building	PIIM6 - Communication and Sensitization	PIIM7 - Labour Procurement through Contractors	PIIM8 - Reinforcing Law and Order	PIIM9 - Procurement of Goods and Services	PIIM10 – Environmental Impacts	PIIM11 – Managing Social Dynamics	PIIM12 – Managing Health Impacts	PIIM13 – Regional Planning & Development
<i>Environment</i>													
Loss of diversity and critical habitat		✓	✓		✓					✓	✓		✓
Logging, deforestation, slash and burn agricultural activities		✓	✓		✓						✓		✓
Change of land use and degradation, erosion and loss of soil productivity, depletion of natural resources (fuelwood, water, aquatic resources, etc.)		✓	✓		✓					✓	✓		✓
Increased pressure on, and possible disputes over, land use and common property and natural resources		✓	✓		✓					✓	✓		✓
Air, noise, water, and soil pollution										✓			
<i>Infrastructure, Services and Utilities</i>													
Increased use of existing roads and transportation systems		✓		✓							✓		✓
Increased pressure on education and health services		✓		✓							✓		✓
Increased demand for electricity, water supplies, and sanitation		✓		✓							✓		✓
Unplanned and uncontrolled development of squatter settlements		✓		✓	✓						✓		✓
Increased demand on communications networks		✓		✓							✓		✓
Increased demand for housing		✓		✓							✓		✓
Increased use of/demand for community, religious, and recreational facilities		✓		✓							✓		✓
Improved access through development of road systems		✓		✓							✓		✓
Improved information and communication		✓		✓							✓		✓
Improved housing, water and sanitation		✓		✓							✓		✓

PIIM IMPACT	PIIM MEASURE												
	PIIM1 – Community PIIM Committees	PIIM2 - Land Use Planning and Zoning	PIIM3 - Designation of PIIM No-Go Buffer Zones	PIIM4 - Community Investment and Development	PIIM5 - Local Capacity Building	PIIM6 - Communication and Sensitization	PIIM7 - Labour Procurement through Contractors	PIIM8 - Reinforcing Law and Order	PIIM9 - Procurement of Goods and Services	PIIM10 – Environmental Impacts	PIIM11 – Managing Social Dynamics	PIIM12 – Managing Health Impacts	PIIM13 – Regional Planning & Development
Improved access to and expansion of infrastructure, public services and utilities (health, education, waste management, electricity, water supplies, telecommunications)		✓		✓							✓		✓
<i>Local Economy and Livelihood</i>													
Increased poverty				✓		✓	✓		✓		✓		✓
Increased cost of living (inflation)				✓							✓		✓
Competition for economic resources and employment, e.g., loss of productive land to urban settlement		✓	✓	✓	✓	✓					✓		✓
Reduced availability and increased cost of land, food, fuel and housing		✓	✓	✓	✓						✓		✓
Reduced reliance on local subsistence production systems			✓	✓		✓					✓		✓
Increased dependence on broader cash-based economy to meet needs			✓	✓		✓					✓		✓
Increased economic vulnerability for marginal groups (women, elderly, minorities, etc.)				✓		✓					✓		✓
“Boom /Bust” cycles associated with initial construction, eventual closure				✓							✓		✓
Increased links to mainstream economy				✓			✓		✓		✓		✓
Increased local skills base				✓			✓		✓		✓		✓
Business development opportunities				✓		✓	✓		✓		✓		✓
Employment creation				✓		✓	✓		✓		✓		✓
Increased local labour pool				✓		✓	✓		✓		✓		
Opening of new markets for local products and services				✓		✓	✓		✓		✓		✓
Increased accessibility and availability of goods and services				✓			✓		✓		✓		✓
Alternate livelihood opportunities				✓			✓		✓		✓		✓

PIIM IMPACT	PIIM MEASURE												
	PIIM1 – Community PIIM Committees	PIIM2 - Land Use Planning and Zoning	PIIM3 - Designation of PIIM No-Go Buffer Zones	PIIM4 - Community Investment and Development	PIIM5 - Local Capacity Building	PIIM6 - Communication and Sensitization	PIIM7 - Labour Procurement through Contractors	PIIM8 - Reinforcing Law and Order	PIIM9 - Procurement of Goods and Services	PIIM10 – Environmental Impacts	PIIM11 – Managing Social Dynamics	PIIM12 – Managing Health Impacts	PIIM13 – Regional Planning & Development
Improved local wage and income levels (including opportunities for local sourcing and higher prices obtainable for local products)				✓		✓	✓		✓		✓		✓
Increased local tax revenue levels					✓						✓		✓
Increased individual, household, and community empowerment stemming from increased income and wealth						✓	✓		✓		✓		✓
Health													
Increased incidence of accidents and fatalities associated with project traffic and encroachment on the roads				✓				✓			✓	✓	
Increased pollution (air, water, dust, noise, traffic) due to open fire cooking, substandard sanitation or absence thereof, ill disposal of wastes etc.).											✓	✓	
Proliferation of communicable diseases (including sexually transmitted infections, respiratory infections, waterborne diseases)				✓							✓	✓	
Insufficient number of health centres, staff and medical supplies, inadequate public hygiene facilities				✓							✓	✓	
Changes in nutrition status				✓							✓	✓	
Social Dynamics													
Impacts on traditional beliefs, damage to cultural heritage, loss of knowledge, skills, and experience related to traditional livelihood activities, upheaval in traditional leadership, behaviour, customs, values, and norms, changes in power relationships, including undermining and changing of leadership and traditional authority structures	✓												
Welfare imbalances and differential wage incomes, wealth accumulation and opportunities	✓					✓							
Dilution of social cohesion and cultural disruption (separation of households and communities)	✓							✓					

PIIM IMPACT	PIIM MEASURE												
	PIIM1 – Community PIIM Committees	PIIM2 - Land Use Planning and Zoning	PIIM3 - Designation of PIIM No-Go Buffer Zones	PIIM4 - Community Investment and Development	PIIM5 - Local Capacity Building	PIIM6 - Communication and Sensitization	PIIM7 - Labour Procurement through Contractors	PIIM8 - Reinforcing Law and Order	PIIM9 - Procurement of Goods and Services	PIIM10 – Environmental Impacts	PIIM11 – Managing Social Dynamics	PIIM12 – Managing Health Impacts	PIIM13 – Regional Planning & Development
Changing relationships between groups (gender, age, socioeconomic status, ethnicity)	✓												
Possible marginalization of women, ethnic minorities, and other vulnerable groups	✓					✓							
Loss of local identity	✓												
Creation of land markets leading to changes in traditional land tenure systems	✓	✓											
Increased tension, disputes, and conflicts between locals and migrants concerning natural resources, employment opportunities, and other project benefits	✓					✓		✓					
Increased incidence of social ills, including alcoholism, drug abuse, prostitution, gambling	✓					✓					✓	✓	
Increase in domestic violence, increase in criminality, decrease in law and order, increased ethnic tension and violence	✓							✓					
Opportunities to build community organizational structures	✓			✓				✓					
Increased attention and input by government authorities, NGOs, increased political power				✓	✓			✓					

4.7 *PIIM IMPLEMENTATION*

4.7.1 *PIIMS Management Role*

The Project will establish a role within its Health, Safety, Security, Environment & Community (HSSEC) directorate, either from existing or additional resources, specifically to address, coordinate and manage the various aspects of the PIIMS and activities and associated regional development issues. The role will be responsible for the monitoring and evaluation of PIIM during the Project lifecycle.

There are a number of related operational work streams underway including this PIIMS, the social and environmental management plans, community investment strategy, agricultural strategy designed to manage and mitigate environmental and social impacts. When implementing measures from any of these work streams, the design of the implementation shall take into consideration the intentions of each strategy and the impacts they are designed to manage and mitigate to ensure that there are no conflicts or untended consequences.

4.7.2 *Implementation Timeline*

Some of the PIIM measures commenced in January 2017. All of the PIIM measures where collaboration with external parties is required will be developed in detail before the arrival of construction workforces in June 2017.

The implementation of PIIM12 Regional Development and Planning Strategy will commence in January 2017. The timeline will be the responsibility of Government, however GAC is continuing to provide technical expertise to the Ministry of Mines to fast track implementation.

4.8 *PIIM MONITORING AND EVALUATION*

4.8.1 *Activities*

The prediction of levels of expected in-migration is imprecise and can be affected by factors outside of the control of the Project. In addition, PIIM can occur rapidly requiring management measures and actions to be deployed with as soon as it is observed. In these circumstances, the Project will continue to monitor the in-migration activity as it emerges in the Mine and Port Area, as well as in-migration activity triggered by adjacent projects.

Procedures for PIIM monitoring shall be integrated into the Project's monitoring of Social Performance undertaken as part of the ESMP implementation. The Project's designated PIIM management role shall develop these procedures and submit a PIIM report to the Project HSSEC Director on a monthly basis during the construction phase and quarterly basis during the operation phase. The main topics should be:

- the progress of implementation of the PIIMS;
- the emergence of in-migration in the Mine and Port Area;
- the emergence of in-migration outside of the Mine and Port Area attributable to the Project;
- the outcome of the impacts of the implemented PIIM measures; and
- proposed enhancements and to the PIIMS measures and actions.

The Project shall submit a summarised PIIM Report to the Prefectural authorities to facilitate co-operation on emerging issues and the relevant measures required.

4.8.2 *PIIM Monitoring Metrics*

The PIIMS implementation report shall include the following metrics.

- Project and contractor employment composition (local, provincial, national, expatriates);
- employment from each recruitment centre;
- in-migrant arrival registrations by the PIIM Committees in each sector in the Mine Area in the review period;
- total number of in-migrants within each Mine Area sector and locations of settlement;
- district unemployment levels;

- level of compliance of with agreed sector-level land use and zoning plans and any emergence of spontaneous or uncontrolled settlement;
- emerging conflict, tensions or social impacts linking the arrival of in-migrants with the emergence of alcohol abuse, drugs, gambling and prostitution;
- grievances related to in-migration as reported by the PIIM Committees;
- a summary of PIIMS activities undertaken during the reporting period and any material deviations or non-compliances; and
- planned PIIMS activities during the next reporting period.

4.9 PIIM BUDGETING

4.9.1 *Budgeting of PIIM Management Role, Monitoring and Evaluation Activities*

The PIIM management role and associated monitoring and evaluation activities will be financed from the existing resources within the Project's HSSEC departmental budget and supplemented where necessary on an as-needed basis.

4.9.2 *Budgeting of PIIMS Implementation*

At present, the financing of the PIIMS measures and actions will be allocated from Project's HSSEC budget.

The Project will also seek additional funding and implementation support from international donors and NGOs who are seeking to support socio-economic diversification in resource-rich emerging economies. Typically, funding and support would focus on:

- increasing the ability of local communities to engage in the PIIMS and RDPS process;
- capacity building of local authorities to institutions to design, plan, manage and implement inclusive RDP strategies with the integration of mining sector activities;
- capacity building of local businesses to provide goods and services to the mining sector;
- upskilling of local communities, particularly youths and women; and
- promotion of transparent governance and sustainable business climate.

4.9.3 *Budgeting of Community Investment*

Community investment will be financed by an annual budget of US\$ 500,000 for the first 10 years, followed by an annual budget of US\$1,000,000 per year for the life of mine.

5.1 STRUCTURE OF THE SECTION

This section describes the linkages between in-migration and existing / future regional development plans and policies, and the proposed intentions of the Project's towards regional development and planning.

5.2 LINKAGE BETWEEN PIIM AND REGIONAL DEVELOPMENT PLANNING

5.2.1 Definition of Regional Development & Planning

Regional development and planning (RDP) is defined by the International Council for Mining & Minerals (ICMM) as public planning that supports longer-term socio-economic diversification at a sub-national level¹. Mining projects make significant infrastructure investments that have the potential to provide wider benefits if planned and designed in alignment with regional socio-economic needs. If efforts are not made to diversify the local and regional economy, large projects can create a culture of dependency leading to problems following the closure or decommissioning.

5.2.2 Linkages with PIIM

Some of lessons learned and success factors identified in *Section 4.2.2* and embedded in the PIIM measures and actions in *Section 4.4* are that:

- Successful PIIM relies on project-specific plans and processes but needs to be coordinated with local and regional authorities in the framework of wider regional socio-economic development, infrastructure and land use planning.
- Implementation of a diversified growth strategy that is adopted by government ensures that the region derive benefits from the Project.
- Proactive management of in-migration ensures that the Project's "multiplier effects" are directed away from the Project areas to locations with the capacity to accommodate the resulting growth.
- Implementation of an agricultural program and landscape rehabilitation program in buffer zones can lead to increased food production for local host communities.

¹ Mining and economic development – regional development planning, ICMM, 2014

- Implementation of land use planning discourages in-migrants settling on land being used or has been zoned for another use.
- Implementation of programs to strengthen business capacity of local small to medium enterprises (SMEs) will facilitate them to provide goods and services to the Project.
- Implementation of community development approach which aligns development initiatives with national, provincial & local government's intentions will act as a catalyst and facilitator in establishing pilot projects that can be replicated.

These factors are intended to manage in-migration but they are also typical RPD measures designed to support longer-term socio-economic diversification at a sub-national level. The main difference is that RPD is normally the responsibility of the national, provincial or local-level government, while management of PIIM is the mainly the responsibility of a Project. However, RDP and PIIM management are activities that are significantly interrelated and have common objectives.

5.2.3 *Risks of a Private-Sector RDP Strategy*

It is not a private sector project's right to assume the government's responsibility for undertaking a regional development and planning strategy (RDPS). In these circumstances, a private sector project therefore could initiate, collaborate or participate in some aspects of a RDPS when it is aligned with managing in-migration or mitigating other project impacts.

The major risk of assuming partial responsibility for initiating, collaborating or participating in a RDPS is that a private sector project may permanently inherit this responsibility and in the long-term become a proxy government authority. This may have potentially serious consequences for the region before and after project closure. A mining company does not have the legal, technical or financial resources to act as a proxy local authority and trying to do so may significantly impede its operations and therefore the benefits that flow to the local communities. In addition, this role would cease at project closure leaving a legacy of dependence.

Therefore, a project must design its participation so that a RDPS can be transitioned over to local or regional authorities as soon as possible after commencement. For this to be effective, a private-sector RDPS must include a sophisticated government engagement and participation process while concurrently facilitating the building of government capacity and building the collaborative support and involvement of local community and non-government stakeholders.

The Project therefore shall initiate a RPDS with the following characteristics:

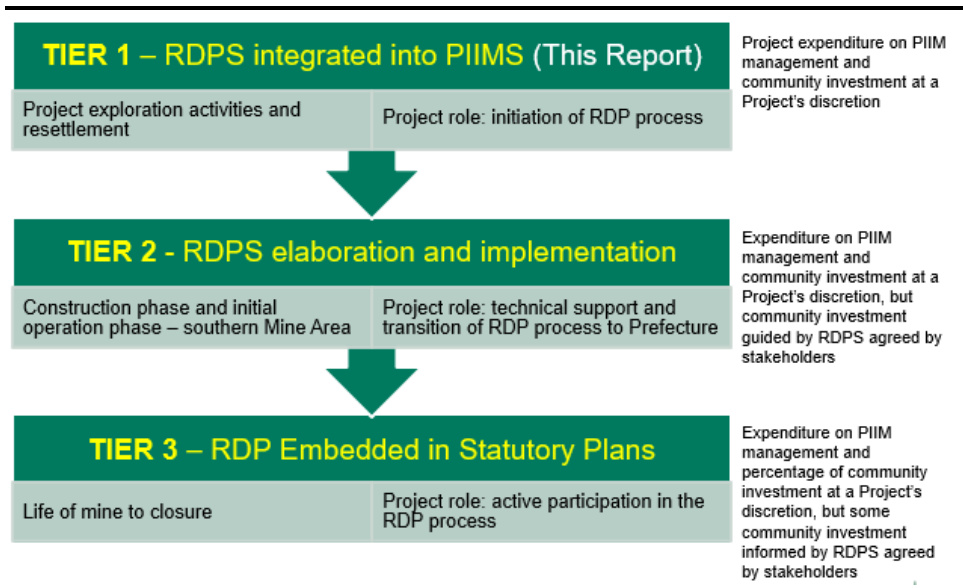
- The ultimate government department or entity who will take over the RDPS will be engaged immediately after Project commencement and regularly thereafter on the structure and content of the RDPS, the timetable for transition and the metrics that must be met by the government before it will assume responsibility.
- Technical capacity building in RDPS will be supported financially and technically by the Project.
- The development of the RDPS will include the engagement and participation of local communities at district and sector level.

5.3 **PROPOSED PROJECT RDP IMPLEMENTATION MODEL**

5.3.1 **Transition Strategy**

The implementation of the Project RDPS will be through a transition strategy, divided into three tiers that flow from each other. The three tiers are shown in Figure 5.1

Figure 5.1 **Infographic – PIIMS / RDPS Implementation Strategy – Tiered Transition**



Tier 1 is the PIIMS and a conceptual RDPS prior to the commencement of the construction phase of the southern Mine Area Project. The Project's expenditure on PIIM management and community investment will be at its sole discretion during this period.

Tier 2 is the elaboration of a detailed RDPS applicable to the Project footprint and then the transitioning of the RDPS to a designated national or prefectural-level government entity or agency. The Project's intention is that transition

will occur before the end of Year 1 of the mining operation phase, or sooner as agreed between the Project and the national, regional and prefectural governments. The Project will fast-track government capacity through financial and technical support programmes either directly or through third-party NGOs. During this period, expenditure on PIIM management and community investment will continue to be at the Project's discretion, but community investment will be informed by the RDPS agreed through consultation with all stakeholders.

After transition, the RDPS will be the responsibility of the government and the Project will continue to be a participant in the process. At no time will the Project assume permanent responsibility for RDPS, assume the responsibilities of a government authority or act as a proxy government authority.

Tier 3 will be the embedding of the RDPS into a statutory regional development plan which is the responsibility of national and prefectural-level government authorities. During Tier 3, expenditure on PIIM management will continue to be at the Project's discretion, but community investment will be directed by the statutory regional development plan agreed through consultation with all stakeholders, including the Project.

5.3.2 *Objectives of a Tiered Transitional RDP Strategy*

The objectives are:

- to be a strategic decision-making tool informing the company's thinking on regional development issues;
- to prioritise enabling and social infrastructure essential to the Project's operations and activities that will facilitate the management of PIIM and encourage socio-economic development;
- to facilitate engagement with Government agencies i.e. local, prefectural, regional and national to align the transitional RDP strategy with their long-term socio-economic development and planning intentions;
- to align the Project's interests with the interests of adjacent mining projects on regional development issues of mutual benefit and facilitate collaboration;
- to demonstrate to international finance institutions that there is a management strategy in place to mitigate predicted and unforeseen socio-economic impacts especially those targeted towards in-migration;
- to provide the best option for infrastructure service delivery at local level and create a model that can be replicated for other investment within the region by other projects;

- to build the capacity of the government entity designated to assume responsibility for the RDP, as well as the timetable for transition and the performance indicators that should be met;
- to ensure that the Project leaves a lasting legacy of sustainable socio-economic development for the benefit of the region over the long-term.

5.3.3 *Implementation of the Tiered Transitional RDP Strategy*

The implementation is yet to be defined in detail by the Project, however the indicative process under consideration is outlined below.

- **Step 1:** The Project will facilitate the setting up of a transitional RDP multi-stakeholder forum representing all parties who have an active role in RDP including representatives from the Project, regional and prefectural governments and other Projects. The forum will be chaired by the Project in its capacity as the entity temporarily responsible for developing the RDP and building the capacity of government to assume control.
- **Step 2:** The transitional RDP forum will seek the participation of local community institutions, civil society groups and non-government organisations that have an interest in RDP.
- **Step 3:** The transitional RDP forum will identify and partner with a donor organisation and/or other mining investors that might be prepared to co-finance and co-manage the implementation of the RDP strategy and assist in the capacity building of the future government entity who will assume responsibility of the RDP.
- **Step 4:** The transitional forum will establish a series of sub-committees focused on RDP issues such as infrastructure, services, utilities, business capacity building, economic development, community relations, law and order and others as deemed necessary to put proposals forward to the forum for discussion and implementation.
- **Step 5:** The transitional forum will monitor the capacity building efforts of the future government entity who will assume control of the RDP against key financial and technical performance indicators agreed between all stakeholders and within a mutually agreed time-frame.
- **Step 6:** When all performance indicators have been met, the chairing of the forum by the Project will be transitioned to the new government authority and the Project representatives will assume a participant role.

5.4 *PREFERRED PROJECT DEVELOPMENT SCENARIO*

5.4.1 *Determining the Preferred Scenario through Regional Planning*

Before the Project facilitates the setting up of the transitional forum, it would be prudent for a preferred development scenario to be selected (see *Section 3.4* for description of development options). This will inform the Project's thinking on its RDP priorities. Selection of the preferred option will be determined internally through a risk/benefit analysis. This exercise should seek to define a desired 'growth concept' that Project's PIIM management measures and actions will seek to reinforce.



ERM

The business of sustainability