17 In-Migration

17.1 Introduction

This chapter provides an assessment of the potential for in-migration (or influx) associated with the Simandou Railway. It is well established and accepted that project-induced in-migration is likely to be a major issue for the overall Simandou Project, based on the experiences of other projects in the region and observations of changing settlement patterns in response to exploration activities around the Simandou Mine site over the past five years. In saying this, it must be emphasised that project-induced in-migration is not, by definition, a negative impact that should be avoided or minimised on principle. There may be many socio-economic benefits of migration, both to areas sending migrants and to those receiving them. However, such benefits are more likely to be realised if the risks associated with in-migration are identified and managed.

The purpose of the In-Migration Risk Assessment (IMRA) reported in this chapter is, therefore, to identify those risks, as they relate to construction and operation of the railway, in terms of the scale of influx and the locations where there is a greater likelihood of in-migration occurring and / or where the receiving communities would be more vulnerable to experiencing adverse impacts from that in-migration, so that the positive and negative social and environmental impacts of that in-migration can be addressed alongside other potential impacts of the Project.

In the remainder of this chapter:

- Section 17.2 presents the approach to the IMRA;
- Section 17.3 describes the baseline conditions with respect to the history of in-migration in the area around the proposed railway;
- Section 17.4 provides an assessment of the likely scale of in-migration, identifies where it is most likely to occur, and where it is likely to lead to the greatest impacts on socio-economic and community conditions;
- Section 17.5 draws on the findings from other parts of the SEIA to provide an overview of the social and environmental impacts that could occur as a result of in-migration;
- Section 17.6 describes how the Project proposes to address these issues through its In-Migration Plan as one of the workstreams within the Community and Economic Development Strategy (CEDS); and
- Section 17.7 summarises the findings of the IMRA.

17.2 Approach

17.2.1 Study Area

The proposed Simandou Railway would extend across Guinea, passing through five administrative regions, nine prefectures, and 22 sub-prefectures (see Table 17.1 and Figure 17.1). From the Simandou Mine site at the eastern end of the rail route to the Simandou Port at the western end, these regions and prefectures are: N’Zérékoré (prefecture: Beyla), Kankan (prefectures: Kérouané, Kankan, and Kouroussa), Faranah (prefectures: Kissidougou and Faranah), Mamou (prefecture: Mamou), and Kindia (prefectures: Kindia and Forécariah).

For the purposes of this assessment, the study area is defined as follows:

- **National Study Area**: the country of Guinea;
- **Regional Study Area**: the nine prefectures crossed by the railways; and
- **Local Study Area**: the 22 sub-prefectures crossed by the railway, including sub-prefecture centres and villages within and adjacent to the alignment corridor.

### Table 17.1 Administrative Divisions in the Study Area

<table>
<thead>
<tr>
<th>Administrative Region</th>
<th>Prefectures (Regional Study Area)</th>
<th>Sub-Prefectures (Local Study Area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N’Zérékoré</td>
<td>Beyla</td>
<td>Nionsomoridou</td>
</tr>
<tr>
<td>Kankan</td>
<td>Kérouané</td>
<td>Kounsakoro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kérouané Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soromaya</td>
</tr>
<tr>
<td>Kankan</td>
<td>Mamouroudougou</td>
<td>Tokounou</td>
</tr>
<tr>
<td>Kouroussa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faranah</td>
<td>Kissidougou</td>
<td>Albadariah</td>
</tr>
<tr>
<td></td>
<td>Faranah</td>
<td>Tiro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gnaleah / Nialia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faranah Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hérémakono</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sandénia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marela</td>
</tr>
<tr>
<td>Mamou</td>
<td>Mamou</td>
<td>Ouré-Kaba</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soyah</td>
</tr>
<tr>
<td>Kindia</td>
<td>Kindia</td>
<td>Madina Oula</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kindia Centre</td>
</tr>
<tr>
<td></td>
<td>Forécariah</td>
<td>Sikhourou</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moussaya</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allasoyah</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maférinyah</td>
</tr>
</tbody>
</table>

The rail alignment corridor has been divided into nine Sections for the purposes of design and assessment (as shown in Figure 17.1). During construction, workers will be located in about 30 accommodation camps distributed along the length of the route, as shown in Figure 17.1, with particular concentrations in Sections 1, 3, 6 and 9. Construction work will proceed at multiple work fronts in parallel throughout the route. There will be a particular concentration of accommodation and construction activity in Section 3 where major tunnelling will take place. During operation, there will be no public access to the railway and activity will be based at a main operations centre at the Railhead Yard in Section 1 and a small midpoint servicing facility near Faranah in Section 6. There will be passing loops every 30 - 60 km along the route where empty ore trains will wait to allow full trains to pass, but there will be no public access to trains or facilities for train crews at these locations.

From a socio-economic perspective, the main communities likely to be affected during construction will be those located near camps and particularly those on existing roads. These include: Beyla, Moribadou and Nionsomoridou in Section 9, Konsankoro and Kérouané in Section 8, Mamaroudou and Tokounou in Section 7, Douako and Faranah in Section 6, Sandenia in Section 5, Ouré Kaba in Section 4, Mamou in Section 3, Madina Oula and Moussayah in Section 2, and Forécariah, Allasoyah and Maférinyah in Section 1.

Once operational, the main facilities for the railway will be located in Sections 9, 6 and 1, at the beginning, middle and end points of the route.
• **Section 9:** The railway starts at the mine with a rail loop located to the east of the Simandou Range between Moribadou and Nionsomoridou. Trains will travel around the loop passing through the ore loaders before leaving to travel to the port. A small mine rail yard and maintenance facility will be established immediately to the northwest of the loop for freight and fuel trains servicing the mine. The route then runs west through a saddle in the Simandou Range. From a socio-economic perspective, the main communities affected by this section of the railway include Beyla (where workers will be housed) and Nionsomoridou (the closest centre to the railway).

• **Section 6:** This section runs through the eastern plateau, approximately 20 km south of the town of Faranah. Faranah is the largest town between the mine and the mountainous region of Mamou, with a population of approximately 87,000. A midpoint service facility is currently planned to be located in this section, south of the settlement of Sonkonia and the town of Faranah. From a socio-economic perspective, the main communities likely to be affected by this section of the railway include Faranah, Douako Centre, Hérémakono and communities along the N2 road running south from Faranah.

• **Section 1:** The final 75 km section of the proposed alignment runs approximately 5 km north of the town of Forécariah to the proposed Railhead Yard around 10 km west of Dandiya. From a socio-economic perspective, the main communities affected by this section of the rail include Forécariah (the prefecture capital and largest town in the region), Maférinyah (the sub prefecture capital and largest town near to the Railhead Yard) and Dandiya (the closest settlement to the Railhead Yard).

The in-migration implications of the operational facilities in Section 9 are discussed in Volume I of the SEIA covering the impacts of the Simandou Mine. This chapter therefore only focuses on the operational facilities in Sections 1 and 6.

### 17.2.2 Legal and Other Requirements

At present, in-migration is still a relatively new area of research and there is no comprehensive set of laws or standards to guide its management. There are no Guinean laws specifically relevant to the issue although it is relevant to note a number of international conventions and agreements to some of which Guinea is a formal party (where this is the case, it is stated below). Rio Tinto acknowledges the need to comply with international agreements in its internal policies and standards.

• The ECOWAS Protocol on Free Movement of Peoples: This protocol, adopted in 1979, was designed to recognise cross-border migration as a way of life for many West Africans and to enhance the benefits of free movement of people, goods and services across borders. The implications of this protocol for in-migrants that are nationals of neighbouring West African countries are considered. Guinea is a member of the ECOWAS Commission.

• Standards on Internal Displacement: This includes the 1998 United Nations Guiding Principles on Internal Displacement and the 2009 African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa. These standards are derived mainly from international human rights principles relating to the freedom of movement within state boundaries, and legitimate bases for restricting such movement.

• International Standards on International Migration: These standards relate to the rights and limitations of persons who are outside of their country of origin, either for purposes of residence or employment. The standards derive from a range of sources relating to labour rights, human rights and protection from forced migration, including the United Nations Convention on the Protection of the Rights of all Migrant Workers and Members of their Families, ratified by Guinea.
Figure 14.1

Prefectures, the sections of rail and emplacements indicative of key functionalities / Prefectures, Rail Sections and Indicative Locations of Key Features
International and Regional Refugee Conventions: The West African region has been affected by widespread and chronic refugee situations that are the result of numerous conflicts. This increases the likelihood that in-migrants to the area may also be refugees, either from neighbouring countries or Guinean refugees who have returned to Guinea relatively recently. The most important standards for protecting the rights of persons who are refugees include the United Nations 1951 Convention Relating to the Status of Refugees \(^{(1)}\) and the Organisation of African Unity (OAU) 1969 Convention Governing the Specific Problems of Refugees in Africa. Guinea is a signatory to both conventions.

International Anti-Trafficking and Smuggling Standards: The Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children of the United Nations 2000 Convention Against Transnational Organised Crime is designed to ensure that in-migration does not enable conditions for the trafficking of women for purposes of sexual exploitation. These standards also enhance the protection of vulnerable local communities from being accessed by international smuggling and trafficking networks as a consequence of increased levels of urbanisation, cosmopolitanism and improved transport infrastructure.

The Pastoral Code: Natural pastures under the Pastoral Code (Law L/95/051/CTRN; August 29, 1995) are defined as the portions of forest domains that provide pasture resources, as well as fallow or post-season crop lands. These areas are open to pasturing livestock, subject to environmental protection considerations and, in the case of fallow agricultural lands, the permission of the property owner.

Constitution or Fundamental Law of Guinea: The Fundamental Law (1948) proclaims the equality and solidarity of all nationals (including equal access to employment), and restored the right of ownership of private property in Guinea, both customary and legal. No nationals can be deprived of property except where public interest has been established, and this is subject to fair and prior compensation. There are, however, no expropriation laws outlining the rights and compensation procedures for land expropriated for public interest. Article 17 protects youth from exploitation and the moral abandonment. The elderly and handicapped people profit from the assistance and the protection of society.

17.2.2.1 Rio Tinto Policies and Guidelines

Rio Tinto has developed various policies and guidance of relevance to managing in-migration. These include the following.

1. Social Risk Analysis Guidance: Rio Tinto recognises that every aspect of the business can involve significant risk. Rio Tinto is committed to managing all sources of risk in a proactive and effective manner through competent risk management. This requires high quality risk analyses to ensure that well founded decisions that enhance opportunities, reduce threats and sustain competitive advantage can be made at all levels within the Rio Tinto Group. This guidance describes how Rio Tinto approaches social risk analysis (SRA) consistent with the Rio Tinto Risk policy and standard.

2. Communities Policy: Through this policy, Rio Tinto sets out to build enduring relationships with their neighbours that are characterized by mutual respect, active partnership and long term commitment.

3. Communities Standard: This standard provides a framework of mandatory requirements for all Rio Tinto business to comply with Rio Tinto’s Communities Policy.

4. Communities Multi-Year Planning Guidance: This document offers guidance to Group managers on Communities multi-year planning, in keeping with Rio Tinto’s Communities Policy and Standard. The content is based on analysis of site managed assessments (SMA) across the entire Group and research supporting the improvement of Rio Tinto’s Communities Work.

\(^{(1)}\) Including the 1967 Protocol to this Convention.
17.2.3 Study Methodology

The assessment has been carried out using an In-Migration Risk Assessment (IMRA) methodology based on guidance from IFC (1) designed to assist projects in identifying and managing risks associated with project-induced in-migration. The main purpose of the IMRA is to identify potential in-migration “hotspots” that may develop in specific locations, at particular times, over the lifecycle of the project so that this can be used to target measures to manage the level of in-migration and mitigate the resulting impacts.

Following the IFC approach, the IMRA considers the likelihood of in-migration occurring along different sections of the rail route taking into account the national context such as population mobility, project “pull” or “push” factors, and the attractiveness of each area. It then considers the capacity of the affected area to accommodate influx to determine the level of risk. Thus, in areas that have a high capacity for absorbing in-migrants, the arrival of a large number of migrants may result in relatively minor social and environmental impacts, and therefore low risk. On the other hand, in areas that are characterised by a low capacity to absorb in-migrants, a relatively low scale and slow rate of in-migration may be sufficient to trigger significant negative social and environmental impacts, resulting in a high level of risk.

In summary, the method involves the following steps.

1. Review of the characteristics of the Project to determine the extent to which it is likely to attract in-migrants and estimation of the potential level of in-migration. This is based on the application of a “pull factor”, derived from evidence relating to the numbers of in-migrants attracted by levels of activity on the Project to date, to future levels of activity during construction and operation.

2. Review of the attractiveness of different sections of the route to determine where in-migrants are most likely to seek to settle. Factors influencing area attractiveness will predominantly be proximity to centres of Project activity and transport links, as well as historical, political and socio-economic variables such as ethnicity, history of in-migration and diversity of economic opportunity.

3. Review of the characteristics of areas in terms of their ability to absorb in-migrants. Factors influencing absorptive capacity will include strength of governance institutions, health and education infrastructure, and availability of fresh water.

4. Evaluation of the level of in-migration risk in the rail alignment corridor. This is derived by considering area attractiveness together with absorptive capacity for each section, using the table below.

Table 17.2 Evaluating Risks from In-Migration

<table>
<thead>
<tr>
<th>Area Attractiveness</th>
<th>Absorptive Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Low-Medium</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Medium</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Medium-High</td>
<td>Not Significant</td>
</tr>
<tr>
<td>High</td>
<td>Minor</td>
</tr>
</tbody>
</table>

It is important to note that predicting the scale of in-migration is extremely difficult, particularly over large areas and long time periods, and it is only possible to give a general indication of the likely attractiveness of

areas to in-migrants and their capacity to absorb them. It is not possible to indicate the level of in-migration risk for individual settlements, though a broad indication of possible hotspots is provided.

It is also important to bear in mind that migration does not occur in a simple cause-effect type relationship with Project activities. For example, the scale of in-migration will not necessarily correlate to the scale of Project activities and in-migration rates may fluctuate or be determined by processes that have nothing to do with the Project directly. Relatively large projects may lead to relatively low levels of in-migration in one context, whereas a relatively small project may lead to much higher levels of in-migration in another. The impacts of in-migration are also context-specific and may vary significantly from one project to another. There is therefore no single “checklist” that will apply to all situations. Nevertheless, predictions are important for planning purposes and will be most valuable when they are re-evaluated at regular intervals and in light of new project developments as well as unforeseen changes in the social and environmental context for the Project.

17.3 Baseline

17.3.1 Sources of Information

Information on population and demographics along the rail route is presented in Chapter 14: Socio-Economic and Community Baseline. There is only sparse information available on patterns and levels of migration.

17.3.2 History of In-Migration in West Africa

West Africa has a long history of population mobility, both within the region and internationally, linked with factors as diverse as long-distance trade, the search for pasture, urbanisation and the growth of administrative centres, the demands of mining, industrial production and plantation agriculture, armed conflict, land degradation, drought and rural poverty. Migration flows are strongly affected by economic and migration policies and other triggers have historically included developments in rail and road construction and other infrastructure works as well as the growth of cities. Transport developments have also facilitated labour migration by reducing the distance and hazards of journeys that hitherto hampered long-distance migrations.

These developments stimulated and influenced patterns of large-scale population movements, giving rise to male-dominated, seasonal and cross-border patterns of migration. In response to this, a number of international agreements have been developed, such as the ECOWAS Protocol on Free Movement of Peoples, which in turn have facilitated migration, in particular across national borders within West Africa. The West African sub-region is the largest region of asylum in Africa, after central Africa, with 725 000 refugees in 2004. During the 1990s, Guinea had a very large number of refugees, first from Liberia, then Sierra Leone.

Rural-urban migration is also a major feature of migrant flows in West Africa, with people leaving farming and other rural economic engagements in search of jobs in towns and cities. Rural-urban migration has typically been male-dominated and taken place on a temporary (seasonal) basis, but increasingly it has become more permanent and includes a larger number of family units. The scale of migration has increased significantly in recent times.

It can be concluded that intra-and inter-country movement continues to be a central feature of West African life. In a future best case scenario with increased agricultural and industrial development and largely improved human development, motivations for migrating will be at least as strong as today. Some migration patterns will remain the same, but the already high level of unemployment will be a key mobility factor for the rapidly-growing young population. This will cause substantial development issues for the region, at the same time as migration to extra-regional destinations is also likely to increase.
17.3.3 History of In-Migration in the Rail Alignment Corridor

While data on migration are available for settlements near the mine site from monitoring carried out during the exploration period between 2008 and 2011, there are no comparable data for the rail alignment corridor and information on existing population levels is limited.

Historically, the middle-region of Guinea has been an area of strong seasonal out-migration and many of the more isolated and rural settlements that may be affected by the development of the railway are characterised as migrant-sending areas. Out-migration is undertaken mainly by young people during the dry season when agricultural opportunities are limited. They often leave in search of employment opportunities, notably in the mines of Banankoro, Siguiri and Bokaria, in the urban areas of Guinea or abroad. Some return to their home areas to pursue agricultural activities in the wet season, whilst others settle permanently elsewhere. Of 149 villages surveyed along the rail alignment corridor, more than 30 said they experienced a seasonal rural outbound migration to the mines. Another 31 villages said that youth migrated for work elsewhere in Guinea or abroad (1).

Data collected on population movements since the last 1996 census suggest that migration is characterised by the following:

- migration of persons of working age to mining areas;
- migration of youth to urban areas to study and find work;
- displacement within Guinea following unrest and attacks on civilians by rebel groups operating on the border regions with Liberia and Sierra Leone in the early 2000s;
- influx of refugees from neighbouring countries and their subsequent integration into local communities;
- influx of traders and artisanal miners from outside the area (including Fulani, Susu, Kpelle and others);
- returning refugees and persons displaced internally by violence; and
- the movements of nomadic pastoralist communities.

Residents that remain in the rural villages permanently are typically individuals lacking the skills or social capital to engage in migration, or locally-bound individuals such as family heads and married women. The effect of this is to leave a significant shortage of skilled labour within some villages. This may have significant implications for the nature and scale of any impacts related to in-migration.

Specific aspects of in-migration along the route of the railway are discussed below.

17.3.3.1 Refugees and Return Migrants

Guinea has seen an influx of refugees and return migrants who were displaced during civil disturbances in Liberia and Sierra Leone from 1990 to 1995. International agencies and non-governmental organizations (NGOs) such as the United Nations High Commission for Refugees (UNHCR), the United Nations Children’s Fund (UNICEF), and the World Food Programme (WFP) built socioeconomic infrastructure such as camps, roads, schools, bridges, wells, and health centres to serve an estimated 500,000 refugees and return migrants that arrived in Guinea in successive waves from 1990 to 1995. These refugees and return migrants clustered in areas inhabited by members of the same ethnic group, sometimes in existing buildings but eventually into new structures, expanding the size of towns and villages in the area.

The settlement of refugees along the route led to the dramatic expansion of some settlements. Forécariah Prefecture (Section 1) saw a sharp population increase as a result of refugees and return migrants in the early to mid-1990s, especially in border sub-prefectures such as Moussaya and Sikhourou Benté. The coastal town of Benty, for example, saw a population increase of 117% and Moussaya 154% from 1990 to 1996. Since 1995, about 24,000 refugees settled along the coast in Forécariah. There are also concentrations of refugees in Kindia sub-prefecture.

Over recent years, the refugee caseload has decreased significantly. Between 2004 and 2007, UNHCR assisted the repatriation of approximately 50,000 refugees to their countries of origin, mostly from the prefectures of Kissidougou and N’Zérékoré. Following the end of the repatriation programme, those refugees that remained in Guinea were expected to make their own arrangements to return. By 2008, there were still approximately 5,000 refugees, mostly of Ivorian and Liberian origin, residing near Kouankan. Many of these have integrated within local village communities. Approximately 3,000 refugees resided in Camp Moola in Farmoréah and were given land to integrate with the local population.

17.3.3.2 Migrant Herders

Migrant herding occurs over the route of the railway, but particularly in the sub-prefectures of Kérouané, Sandénia, Marella, Soyah, Souguéta and Sikhourou. There are no data on the size of the migrant herder population.

According to information from the local administration, each year in mid-February the prefecture decides on a date for flocks to head upland. During years in which there is insufficient grass or water in upland areas, the migrant herds can descend early to pastures occupied by permanent residents, causing overcrowding and conflict as migrant herders are reluctant to commit to a fixed date to leave. These conflicts are resolved through the Services régionaux d’animation de l’élevage (SRAE), prefecture-level government bodies for herding management whose terms and conditions vary by prefecture.

17.3.3.3 Artisanal Miners

The study area contains deposits of gold and diamonds that have attracted artisanal mining, often managed by individuals from outside the local area or neighbouring countries such as Mali, Ivory Coast and Sierra Leone. Diamond mining activity frequently follows riverbeds, and as such mine locations and associate migrant flows can be seasonal and temporary.

17.3.4 In-Migration Plan, 2008-2012

The Simandou Project has been under development for several years and considerable activity has taken place in the mine area during the exploration phase, which has already resulted in substantial movements of people attracted by the opportunities deriving directly or indirectly from these activities. The Project has therefore already given considerable attention to measuring these effects and exploring ways of understanding and managing their impacts. The Project acknowledges that, in addition to managing the potential negative impacts on local communities of in-migration, there is also a business case for managing in-migration, since an uncontrolled or unmanaged massive influx of job seekers presents high risks that will ultimately affect the Project. These include possible conflicts over jobs, health and social risks which could affect the workforce. The Project has therefore already given considerable attention to measuring these effects in the mine area and exploring ways of understanding and managing their impacts.

To focus these efforts, an In-Migration Plan has been in place since 2008 and is currently being updated. Until now, this has addressed only the mine area, since this is where Project-induced in-migration has taken place. In-migration along the railway has not been addressed explicitly in the existing Plan. Actions undertaken under the Plan have included monitoring of migration in the mine area, establishment of In-Migration Committees in four villages, and support for urban and village zoning plans for settlements affected by Project-induced in-migration.

17.4 In Migration Risk Assessment

Using the methodology described in Section 17.2.3, this section considers the variables of Project Characteristics, Area Attractiveness and Absorptive Capacity to provide an assessment of in-migration risk for the Simandou Ore Railway.
17.4.1 Project Characteristics and Scale of In-Migration

17.4.1.1 Project Characteristics influencing In-Migration

As indicated in earlier sections, the Project is expected to stimulate substantial in-migration along the rail route, albeit not at the same intensity anticipated at the mine or port. Several features of the Project could prompt in-migration.

- **Local labour requirements**: Construction of the railway will employ a significant number of people. There is a perception in the local area, evident from the results of stakeholder engagement during the SEIA, that a high level of opportunity will result from this and this is likely to stimulate significant in-migration. In practice, the level of construction employment available to local workers will be quite low and focussed on unskilled and lower skilled workers, with about half the workforce being foreign workers employed by international contractors. Employment during operation will be much more limited and focussed principally at the railhead yard in Section 1. The aim during operation will be to achieve a high level of Guinean participation in the workforce over time. Although the actual level of employment opportunity will be much lower than the perception, Project labour requirements are therefore likely to draw strong flows of job seekers from around the country and beyond.

- **Project demand for goods and services**: The scale of the Project has also generated high expectations around opportunities associated with the supply chain. Again, although demand from the railway for goods and services in the local study area will be low during construction (much of the material required for construction will need to be imported), and very low during operation, this is still likely to be a strong pull factor.

- **Perceptions of opportunity associated with construction camps**: As noted in Section 17.2.1, the construction workforce will be largely housed in about 30 camps located along the route of the railway. These are likely to act as a focus for in-migration with people looking for work and other economic opportunities associated with the Project workforce. Again in practice, the level of opportunity will be relatively limited as the camps will be operated as secure sites managed by the construction contractors.

- **Operation of construction sites**: In addition to the accommodation camps, construction works on the railway line are also likely to act as a magnet for people. The fact that workfronts will move continuously along the construction corridor will reduce the attractiveness but sites where works are likely to continue for some time, for example the tunnelling sites in Section 3 and the sites of major river and road crossings, are likely to attract some in-migrants.

- **Creation of a new transport corridor**: The creation of new transport links is known to lead to influx of people into areas that have previously had poor accessibility. Although the Simandou Railway will not provide transport for the public, the creation of a new linear operational corridor is likely to prompt some movement of people along the route into new areas. This is likely to involve local people looking for new land as well as in-migrants, but this dispersion of people, and the resulting development pressure, is a feature of the pattern of movements likely to result from the railway.

- **Project improvements in local physical and social infrastructure**: The Project has already implemented some infrastructure improvement projects in Beyla and will facilitate improvements in other physical and social infrastructure along the route of the railway, and particularly in Faranah and Forécariah. In the context of high poverty and vulnerability, these will be strong pull factors for in-migrants.

The factors listed above will combine to result in the Project providing a strong attraction for in-migrants from both the real and perceived opportunities it presents.
17.4.1.2 Predicting the Scale of In-Migration

Reliable prediction of the scale of project-induced in-migration is extremely difficult and complex and cannot be reduced easily to a single figure of population increase. This is because project-induced migration practices are not characterised by a linear or straightforward relationship to projects and are typically shaped by multiple factors external to the project environment and beyond the control of the project. These could include:

- armed conflict within the region which may lead to an unplanned influx of refugees and other displaced persons towards the Project area;

- changing economic conditions at the macro-level (either positive or negative), and their effects on local, regional, national and wider west African employment prospects, which may either alleviate or intensify in-migration pressure on the Project area;

- the development of other projects within the area of influence of the railway, which may have an effect on migration dynamics. These could either draw migrants away, thereby reducing levels of in-migration, or the cumulative effect of two or more attractive projects in the same area may attract more migrants from further afield and increase in-migration; and

- changes in policies or border control capacity at national boundaries, which may result in either fewer or greater numbers of citizens of neighbouring states seeking to migrate to the mine area.

Attempts to quantify the scale of in-migration along the rail route are therefore highly provisional and limited by uncertainty over possible future changes in the broader socio-economic and political environment.

In this context, a projection of the potential scale of in-migration expected along the railway has been made using data on the level of in-migration that has occurred during exploration activity at the Simandou Mine over recent years. The details of this are explained further in Chapter 18: In-Migration of Volume I: Simandou Mine SEIA, but in summary a “pull factor” has been developed for the Project based using the number of in-migrants per Project worker as an indicator of the level of attraction provided by the Project. At the mine, this “pull factor” is estimated to lie somewhere between 10 and 25 in-migrants per Project worker.

Given the nature of the opportunity presented by the railway and the dispersion of centres of attraction along its 670 km length, it is considered that the pull factor exerted by the railway will be lower than the point attraction offered by the mine. There is no single area for in-migrants to target in search of jobs and other economic opportunities, there will be few economic opportunities during construction and even less during operation, and much of the railway corridor is fairly inaccessible. Taking these factors into account, a pull factor of between 5 and 10 has been assumed for the railway.

Using this range, it is estimated that between 50 000 and 100 000 in-migrants could come into the local area during construction of the railway and about 10 000 to 20 000 during operation. Given that some in-migrants are likely to stay in the transition from construction to operation, the overall flow is considered likely to be between 60 000 and 110 000. Based on data from the mine exploration period, 40% are likely to be relatively local migrants (from within the local prefecture), 50% from the rest of Guinea, and 10% from other countries.

During construction, in-migrants are likely to cluster around accommodation camps, in particular where these are located near larger settlements and roads. The locations of camps and access roads to them are shown in Figure 17.1. This is expected to have the largest effect in at the two ends of the route (Sections 1 and 9), in the Mamou area (Section 3) and around Faranah (Section 6).

(1) Based on 9 100 rail construction workers and 1 670 railway operations staff. Given the very approximate nature of these calculations, all figures are rounded to the nearest 10 000.
During operation, in-migration will largely be focused on Section 1 at the Railhead Yard, and to a lesser extent at the midpoint facility at Faranah in Section 6, but the perception of opportunity offered by the railway and the opening up of the new operational corridor is likely to result in some impact throughout the route and particularly where existing roads cross the line. There may also be some tendency to congregate around passing loops where empty trains will stop to allow full trains to pass, even though the trains will not be accessible and interaction between train crews and the public in these locations will not be permitted.

The next steps in the assessment are to consider how the attractiveness of different locations might influence this pattern of distribution, to assess the absorptive capacity of different areas and to evaluate the resulting in-migration risk.

### 17.4.2 Area Attractiveness

The route of the railway is predominantly rural in nature, with low population densities and characterised by numerous small dispersed settlements. Ethnicity and ethnic diversity varies from place to place but many areas have a reasonable history and tradition of migratory activity, making them relatively attractive. Sections 2-5 of the route are close to the international border, raising the possibility of cross-border migration, although international migration has also been characteristic of the eastern and western ends of the route. The N2 road provides good east-west access along much of the route, with other roads intersecting the route in various places (see Figure 17.1). The road network in general is of poor quality and roads are often inaccessible in the wet season, but several roads will be improved to permit access to the railway for construction and this will assist movements within the area. Taking these factors into account, the attractiveness of rail sections is not expected to vary greatly, except in Sections 1, 3, 6 and 9 where greater levels of economic activity and economic diversity, together with proximity to centres of activity on the route are expected to make these areas more attractive.

- In Section 1, the prefectural town of Forécariah Centre is located 66 km from Conakry, the capital, and had an estimated population of some 12 000 inhabitants in 2012. The N4 road connects Forécariah with Conakry and with the sub-prefectural capital, Maféриня, and is in good condition, although other roads in the sub-prefecture are poorly maintained. Most people in both towns are dependent on traditional livelihoods – namely agriculture, pastoralism and fishing – although both towns also offer a variety of livelihood opportunities, such as charcoal making or handicrafts. Both towns have a history of in-migration.

- Section 3 has poor inaccessibility, low population density and little economic development, making it unattractive in principle to migrants, but against this it will form a major focus of Project activity during construction and road access will be improved by creation of new links to tunnel construction sites (see Figure 17.1). It is also close to the international border, leading to the potential for international movements.

- In Section 6, both Faranah Centre and Douako Centre offer their residents some diversity in livelihoods, including artisanal mining of gold and diamonds, but there is no significant history of in-migration into the area. Access is good, with the N2 running through the section and links to the N1 to the north.

- Section 9 benefits from reasonable transport links including to the south and east, and a reasonable range of economic opportunities largely provided by the Simandou exploration programme, and as such will be attractive to potential in-migrants. Local settlements have already experienced significant influx related to exploration and as a result, populations are relatively heterogeneous, making them more attractive to in-migrants.

Sections 1 and 9 are considered to be of medium to high attractiveness, Section 3 of medium attractiveness, and Section 6 of low to medium attractiveness during construction. Sections 1 and 6 remain of similar attractiveness during operation with the others declining to low.

Other areas along the route are considered to be of low attractiveness, being predominantly rural and having only low levels of Project activity.
17.4.3 Absorptive Capacity along the Rail Route

The local study area along the rail route is, as with much of Guinea, characterised by a lack of physical infrastructure and social infrastructure. Many settlements, for example, are well below the national average of 61% of the rural population having access to improved drinking water infrastructure. Boreholes are the most common water infrastructure along the railway alignment corridor, but they are relatively scarce and the majority of people are dependent on surface water sources such as rivers and creeks. It is also not uncommon for people to have to walk up to three hours on foot to reach their nearest health centre.

As such, the smaller settlements across the route would struggle to accommodate a significant number of in-migrants with their existing infrastructure. In terms of institutional capacity, however, it is worth noting that although communities across the affected prefectures appear to have very limited administrative and institutional capacity to absorb large numbers of in-migrants, their history of hosting refugees and migrants relatively successfully in the past suggests that these risks may be lower than they might appear at first sight.

Unsurprisingly, the more developed areas in Sections 1 and 9 and to a lesser extent Section 6, are better equipped in terms of infrastructure and institutional capacity than the more rural sections, although not in proportion to the probable numbers of in-migrants they may have to absorb.

In Forécariah prefecture (Section 1), only 36% of the people have access to an improved borehole, compared with the national average of 71% of urban and 61% of rural populations having access to boreholes or improved wells. Forécariah Centre has a secondary school, a university and a hospital, while Maférinyah has a secondary school and a community hospital. Most households in Maférinyah are connected to a centralised grid and are supplied power from Conakry; however, the power supply is reportedly inconsistent.

Beyla Centre in Section 9 has very limited access to drinking water for the urban population (2 000 persons per functioning borehole), and although 95% of the population has access to latrines, this is at the rate of 29 persons per latrine. Beyla is the site of a prefectural hospital and three health centres, while both Nionsomoridou and Moribadou have health centres, albeit with limited capacity. There are six primary schools in Beyla and two secondary schools, while both Nionsomoridou and Moribadou have a primary school. In-migration committees have been set up in Beyla, Nionsomoridou and Moribadou (in Section 9), which have facilitated the development of zoning plans for these settlements and have increased the awareness of the authorities and residents around the risk of potential in-migration. There is, however, still a lack of technical capacity and financial resources to support long term local developments and management of influx.

In Faranah Prefecture (Section 6), only 48% of people have access to an improved borehole, compared to the national average of 71% urban and 61% rural populations having access to improved drinking water infrastructure, such as boreholes or improved wells. As there is no public sanitation network, villages and towns in the region use pit latrines; however, only 33% of the population have access to such facilities. Moreover, only 52% of the villages in the region have at least one public primary school. Douako Centre has better infrastructure than many other villages in the region. Although drinking water is inadequate, the village benefits from a primary school, a middle school and a health centre. The village, however, has no access to electricity.

Overall, the absorptive capacity of much of the local study area is low but increases to low to medium in Sections 1 and 9.

17.4.4 Summary of In-Migration Risks

In-migration risk during construction and operation is summarised in Table 17.3.
### Table 17.3 Summary of In-Migration Risks along the Simandou Ore Railway

<table>
<thead>
<tr>
<th>Rail Section</th>
<th>Absorptive capacity</th>
<th>Attractiveness</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Construction</td>
<td>Operation</td>
<td>Construction</td>
</tr>
<tr>
<td>1</td>
<td>Low-Med</td>
<td>Med-High</td>
<td>Major</td>
</tr>
<tr>
<td>2</td>
<td>Low</td>
<td>Low</td>
<td>Minor</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>Med</td>
<td>Major</td>
</tr>
<tr>
<td>4</td>
<td>Low</td>
<td>Low</td>
<td>Major</td>
</tr>
<tr>
<td>5</td>
<td>Low</td>
<td>Low-Med</td>
<td>Moderate</td>
</tr>
<tr>
<td>6</td>
<td>Low</td>
<td>Low-Med</td>
<td>Minor</td>
</tr>
<tr>
<td>7</td>
<td>Low</td>
<td>Low</td>
<td>Minor</td>
</tr>
<tr>
<td>8</td>
<td>Low</td>
<td>Low</td>
<td>Minor</td>
</tr>
<tr>
<td>9</td>
<td>Low-Med</td>
<td>Med-High</td>
<td>Major</td>
</tr>
</tbody>
</table>

Note: In-migration relating to rail-related activity at the mine during operation is addressed in Volume I of the SEIA.

Following the risk assessment approach described in Section 17.2.3, which considers area attractiveness together with absorptive capacity, it is evaluated that for most sections of the railway, the in-migration risk is minor during both construction and operation. During construction, Sections 1, 3 and 9 will all face major risks from in-migration, while there will be a moderate risk in Section 6. Once work transitions to operation, this will reduce to minor or not significant in Sections 3 and 9, but will remain major in Section 1 and moderate in Section 6.

### 17.5 Overview of Impacts Caused by In-Migration

The findings of this risk assessment suggest that a substantial overall level of in-migration will occur along the railway and that risks of adverse impacts will concentrate in Sections 1, 3, 6 and 9 during construction and Sections 1 and 6 during operation. On the one hand in-migration will bring benefits in economic development and diversification, providing opportunity for members of the existing population who can harness these opportunities. But against this, rapid physical expansion of towns and villages and uncontrolled squatter development along roads, and potentially the operational railway corridor, will have significant implications for the use and availability of land and other resources, for spatial planning, and for the traditional and local government authorities.

Without mitigation, the primary impact of in-migration will be an increase in population, physical expansion of towns and villages, and informal development on the outskirts and alongside roads and tracks approaching settlements. Land use intensification combined with limited land availability, is likely to increase the strain on existing physical, social and human resources as well as governance systems. The potential for unplanned and uncontrolled growth could lead to issues surrounding safety, sanitation, and service delivery.

In terms of impacts on infrastructure, the increased population will increase demand on water, power, sewerage and waste facilities, health and education facilities, and telecommunications. These services are already constrained and significant social, environmental and health risks will arise from a failure to adequately provide for these needs.

Pressure on land could potential displace or introduce conflict with existing land owners and communities. Increased demands on existing resources for crops, livestock, fish, wildlife, and forest products, and increased food prices, will have a direct and negative impact on food security in the affected villages and prefectures along the rail route.

Physical environmental impacts will include impacts on biodiversity through increased pressure on bushmeat, firewood, charcoal, other non-timber forest products, fish, other food sources and water. Continued uncontrolled exploitation, spurred by in-migration, could be detrimental to biodiversity, as well as to the livelihoods of people who are dependent on natural flora and fauna for food and other resources. The
loss or disruption of these traditional resources is also likely to have a particularly adverse impact on women and other vulnerable groups who rely more heavily on them.

Impacts on biodiversity will be exacerbated by increasing access into areas that have generally been less at risk from exploitation because of their poorer accessibility. These areas are likely to have retained higher biodiversity value and will experience adverse impacts from development, hunting and a general increase in human activity.

Socio-economic impacts of in-migration will include an increase in prices. The categories of goods and services that may experience price increases include construction materials, food, fuel and transport. Such inflationary trends can reduce the availability and affordability of basic goods and services to the existing population. Considering that a large proportion of the population in the affected prefectures is dependent on subsistence activities, the impacts of price inflation could be quite far-reaching. This will be particularly relevant for those who are economically vulnerable and therefore cannot adapt to increasing prices.

An influx of migrant job-seekers into an area will significantly increase local competition for employment opportunities. It is possible that some migrants will have gained skills in construction in previous large scale projects in Guinea and elsewhere, which will be an advantage in seeking work positions within the Project, and may provide some uplift of skills in the local community. Where in-migrants compete directly against local people, especially for unskilled jobs, it may result in tension, and possible aggression, between job seekers within the affected prefectures, and Guinea more widely.

In-migration can also lead to negative social change and an erosion of cultural values, as migrants bring in different cultural norms and values and attitudes to traditional leadership systems. Vulnerable groups will be the most susceptible to the challenges posed by a changing socio-cultural environment, particularly during construction, as there will be little time and few resources available to these groups to help them cope and adapt. Some receptors – particularly youth, entrepreneurs, and people with higher levels of skills and education – will likely view the socio-cultural changes in the area as not only beneficial, but also a necessary step for economic and community development, both locally and regionally.

An influx of in-migrants is likely to lead to an increase in communicable and vector-borne diseases such as malaria, TB, HIV/AIDS and sexually transmitted diseases, exacerbated by increased pressure on health care facilities and the possible introduction of new diseases. The lack of adequate health facilities in the area might lead to increased use of traditional medicine practices, which are already frequently used in preference to the public health system. However, it should be noted that traditional medicine practitioners will be unable to effectively treat the types and numbers of disease cases that are likely to occur. The Project may also contribute to the development of health inequalities through the provision of health initiatives in selected communities and due to the fact that employees / contractors and their dependants can access site-based medical services which are better equipped and staffed than public health facilities.

17.6 Mitigation of Risks from In-Migration

17.6.1 Framework for Mitigation through the Social Management Framework

A range of specific measures to manage the environment and social impacts of in-migration are identified in the chapters referenced above. A specific focus on the contribution of in-migration to these impacts will be provided through an In-Migration Programme developed as an integral part of the Social Management Framework as illustrated in Figure 17.2. The In-Migration Programme falls within the themes of ‘Urban and Rural Planning’ and ‘Employment Creation and Livelihoods’, and links to the mitigation measures in the themes of ‘Community Health, Safety and Security’ and ‘Cultural Heritage and Awareness’ as appropriate.

17.6.2 The In-Migration Plan

The Project will develop an In-Migration Plan that addresses how the Project will seek to:

- minimise Project-induced in-migration as far as possible;
- manage and direct the flow of in-migrants in accordance with regional planning objectives; and
• implement mitigation measures to address the adverse environmental and social consequences, maximise the benefits, of in-migration.

The In-Migration Plan will cover the following key elements:

1. communication;
2. minimising potential for in-migration;
3. managing and directing influx;
4. enhancing physical infrastructure;
5. building human capacity to manage influx;
6. monitoring and evaluation of in-migration; and
7. consideration of Project closure.

These elements are discussed in more detail below.

Under the In-Migration Plan’s communication activities, the Project will:

• engage with government authorities on issues, risks, and opportunities regarding in-migration;

• engage with local communities to understand their concerns, raise awareness of risks and opportunities, and identify solutions to issues relating to in-migration;

• develop and implement a targeted communications plan in areas known to be potential sources of in-migration and, using migrant networks, inform potential in-migrants of the scale and nature of opportunities, manage their expectations, and where appropriate discourage them from moving to the Project area; and

• communicate the Project’s policy of recruiting through Local Employment Offices and the locations of those offices through activities targeted at potential in-migrants.

To further minimise the potential for in-migration around Project activities, the Project will:

• maintain a clear security zone around all Project land to avoid informal settlement around the perimeter of Project activities, including accommodation camps;

• operate employee bus services from local settlements to discourage people from moving from their village to locations closer to Project sites in search of jobs; it will also improve existing roads and build new roads to facilitate access from larger centres to Project sites;

• plan routes for transport of Project materials, goods and personnel taking into account the potential for in-migrants to be attracted into informal roadside settlement; and

• require Project vehicles to use planned truck stops as far as possible to discourage setting up of roadside stalls in unsuitable locations.
Figure 17.2 Simandou Project Social Management Framework

**Regional Development Strategy**

**Social Management Framework**
- Vision and Objectives
- Organisation
- Funding
- Programmes
- Schedule
- Communication
- Monitoring and Evaluation

**Programme Development**
- Prioritisation
  - Project Affected Peoples
  - Beneficiaries
  - Impacts and Risks
  - Project Phase

**Alignment**
- Development Policies
- Regional Development Forum
- PACV
- Studies and Analysis

**Urban and Rural Planning**
- Resettlement and Livelihood Restoration (PARC Framework and Implementation)
- In-Migration
- Employee Housing
- Infrastructure

**Employment Creation and Livelihoods**
- Agriculture and Food Security
- Local Procurement
- SME Development
- Employment and Work Readiness

**Community Health, Safety, and Security**
- Community Health
- Community Safety and Security
- Human Rights

**Cultural Heritage and Awareness**
- Tangible Heritage
- Intangible Heritage

**Stakeholder Engagement**
- Capacity Building
- Consultation, Information Exchange, and Partnerships
- Grievance Management
- Government
- Donors
- Communities
- Civil Society and NGOs
- Private Sector

**Resettlement and Livelihood Restoration (PARC Framework and Implementation)**

**Beneficiaries**

**In-Migration**

**Employment and Work Readiness**

**Agriculture and Food Security**

**Local Procurement**

**SME Development**

**Employment and Work Readiness**

**Community Health**

**Community Safety and Security**

**Human Rights**

**Tangible Heritage**

**Intangible Heritage**
To manage and direct influx in ways that will minimise its impacts, the Project will work closely with national, regional, local authorities, village leaders, and communities (as appropriate for the area of focus) to:

- support regional development planning that encourages distribution of opportunities across a wider area to avoid concentration of attraction at key Project locations;
- undertake urban planning and development in larger centres (e.g., Faranah) to accommodate in-migrants, in complement with planning for Project employee housing and infrastructure;
- support development of village zoning plans for settlements at high risk from in-migration, to direct in-migrant related development to defined areas where impacts will be minimised and to encourage local people to remain in their villages;
- explicitly include consideration of biodiversity and natural resource impacts of in-migration, and integration of appropriate responses into the overall programme;
- assist with the identification and demarcation of transitional zones for settlement, business, and informal trading in anticipation of an influx of people and associated housing demands, with the aim of directing future settlement patterns and preventing illegal settlement; and
- where appropriate and necessary, assist the local police in controlling access to areas reserved for specific use, to prevent illegal land occupation in the planned area.

The Project’s recruitment policies will contribute to directing influx through the following measures:

- the Project will preferentially hire unskilled labour from local communities using a transparent process for distribution of opportunities developed in consultation with the local community and taking into account other impacts on individual settlements. Resettled households will have priority access to vocational training and employment;
- a database of people looking for work will be maintained and will identify candidates’ place of origin; and
- there will be no recruitment “at the gate” and all recruitment will be managed from the Project’s Local Employment Offices.

In partnership with local authorities and relevant organisations where available and appropriate (e.g., donors, civil society and NGOs), the Project will assist in planning for anticipated increased demands on local infrastructure and services in communities that are significantly affected by in-migration due to Project activities. This assistance will include:

- support for upgrading health, education, and water and sanitation facilities in settlements affected by Project activities and in-migration; and
- focusing Project-workforce housing and vocational training and business support services in larger towns with the most capacity to accommodate new residents.

To support local capacity for in-migration management, the Project will:

- implement an integrated capacity building programme to provide opportunities for local authorities and village communities to plan, prioritise, build and maintain necessary infrastructure;
- in considering capacity-building measures for local government authorities, prioritise institutional strengthening to support a parallel increase in administrative capacity by government partners to cope with increases in in-migration and associated impacts;
• provide technical support to relevant government authorities with the aim of assisting them in effectively administering land development and land use changes as appropriate;

• continue to support the establishment and operation of In-Migration Committees in settlements identified to be at high risk from in-migration. Committees will take part in promoting spatial planning, monitoring in-migration, identifying arising issues, and promoting good relations between local people and in-migrants; and

• work with local authorities and village leaders to actively manage in-migration and its impacts, particularly through registering newcomers and directing them to appropriate accommodation options.

The Project will carry out monitoring of settlements to determine patterns of in-migration, understand the origins, characteristics and motivations of in-migrants, and identify the impacts of in-migration, and will use the results to evaluate the success of its In-Migration Plan and revise it as required. Monitoring, evaluation and plan updating will be undertaken in partnership with In-Migration Committees, local administrations, village leaders, and the community.

The Project will give careful consideration to the legacy of in-migration when plans are made for the transfer of the railway to future operators.

17.6.3 Additional Specific Mitigation Measures

As part of the In-Migration Plan a range of other specific mitigation measure identified in other chapters will be developed, implemented and monitored through construction, operation and closure. These will include:

• working with project affected communities and local authorities to support them in securing safe and sustainable water supplies;

• working with and assisting local authorities in planning for the provision of waste management facilities to meet the needs of the expanded population;

• working in conjunction with relevant partners (eg health authorities, NGOs, development agencies), the Project will develop information, education and communication campaigns around diseases and health practices including sanitation and hygiene;

• using support to village zoning to assist in protecting land-based resources of importance to biodiversity and cultural heritage;

• taking measures to restrict access along roads that are under the control of the Project as far as possible and removing and rehabilitating any roads that are no longer required at the end of construction, to minimise risks to biodiversity from induced access; returning upgraded public roads to their previous condition in areas of high biodiversity value will also be considered;

• avoiding creation of access routes along the railway where possible;

• monitoring changes in land cover and land use outside the Project site to identify loss of areas of importance for biodiversity and cultural heritage; this will include requiring Project workers to report any incidents of incursion by third parties not connected to the Project into the area and any evidence of destruction or degradation of habitats or natural resources through the action of third parties;

• working with the local authorities to discourage informal settlements along Project roads to minimise loss of habitat of value for biodiversity;

• working in partnership with relevant organisations where available and appropriate to design and implement an information and awareness programme regarding sustainable harvesting, grazing, and conversation of natural resources;
• provide education for local agencies and communities on threats to biodiversity from human activities and develop case studies of coexistence between human activities and natural habitat;

• working with local leaders and community groups to support local cultural events and conserve and reinforce local traditions and culture; and

• supporting community-based and inter-village youth programmes for sport, arts, and culture.

17.6.4 Residual Impacts from In-Migration

It is not possible to predict the effect of the measures described above in terms of reducing the significance of in-migration as there are too many variables and uncertainties to take into account. Nevertheless, it is likely that, even with careful attention to in-migration planning, significant impacts will remain for the environment and community in the local study area during construction of the railway and for several years as operations increase to their full capacity. In-migration is then expected to level off. As the railway will not close there will be no impacts from decommissioning and closure.

17.7 Summary of Findings

The Project is projected to give rise to high levels of in-migration, with an estimated influx of up to 110,000 people into the sub-prefectures along the railway. During construction, migrants are likely to spread out along the entire route but to concentrate in Sections 1, 3, 6 and 9 (Forécariah, Mamou, Faranah and Beyla). During operations, the focus is expected to pull back to the two main hubs for rail operations in Sections 1 and 6 in Forécariah and Faranah.

The majority of in-migration is expected to occur during construction, but it is likely to continue at a lower rate as the Project ramps up to full operations. The trend of population growth and associated demand for land and housing is therefore likely to continue for many years. Settlements may also experience short periods of rapid in-migration linked to perceptions of new opportunities associated with the Project development at various points in the Project lifetime, and to reversals as actual levels of opportunity become evident.

The primary effects of in-migration will be an increase in population and resulting rapid expansion of towns and villages and uncontrolled squatter development outside existing settlements, putting pressure on existing infrastructure and services. This will cause a number of impacts on the social, economic, natural, cultural and physical environment (assessed in other chapters of the SEIA Report) to be increased, notably in relation to water resources and pollution, biodiversity, cultural heritage, land use and livelihoods, social structures, cultural values and traditions, and community life and community health. It will also offer some beneficial impacts such as economic diversification.

The primary vehicle for addressing the impacts of in-migration will be implementation of an In-Migration Plan as part of the Social Management Framework. This will continue and build upon the activities already under way as part of the Project’s existing In-Migration Plan. The Programme will follow a mitigation hierarchy which prioritises minimising Project-induced in-migration to the extent possible: spatial planning and other measures to manage and direct the inflow of migrants to appropriate locations in accordance with the objectives of regional development planning; and mitigation measures for managing the environmental and socio-economic impacts brought about as a result of the in-migration. Monitoring and evaluation will continue through the life of the Project and be used to review and update the In-Migration Plan as needed.