

Egypt

Cairo Metro



Source: Egyptian Streets (<https://egyptianstreets.com/2015/10/25/9-things-you-should-know-about-the-cairo-metro/>)

The expansion of the metro network in Cairo required adherence to environmental and social safeguards, which incorporated inclusive stakeholder engagement. The expansion also created training and employment opportunities for young people.

The Cairo Metro (the Metro), Africa's first urban railway, is owned by the National Authority for Tunnels (NAT), a government agency set up by the Ministry of Transport in 1983, and operated by the Egyptian Company for Metro Management and Operations (ECM). It was built to:

- serve the people of Cairo (the city was home to 10 million residents in 1987 when the first line opened, and almost twice as many people (19.7 million) in 2016);
- reduce severe congestion on the road network; and
- be the centre of a modern, integrated and efficient public transport system.

The Metro has three lines. Line 1 opened in 1987, and Line 2 was completed nine years later in 1996. The construction of Line 3 began in 2006.

Line 3 is being built in four phases. Phase I opened in 2012 and Phase II welcomed its first passengers in 2014. Phase III, which is the primary focus of this case study, is still under construction and is due for completion in 2024. There are plans for a fourth phase, as well as two new lines.

When it is complete, Line 3 will be the first metro line to cross Cairo, linking the east and west of the city. In the third phase of construction, the existing infrastructure is being extended to the west by 17.7 kilometres (km). The project is a key component of the Greater Cairo Transport Master Plan because it will provide two densely populated, socially disadvantaged districts (Imbaba and Boulak El Dakrou) with safe and reliable access to the city centre and central business districts.

Line 3 - Phase III is being developed under the ownership of NAT, with international funding from the French Development Agency (Agence Française de Développement (AFD)), and co-financing from the European Investment Bank (EIB). To meet national legislative requirements, as well as the environmental and social governance processes of the lenders¹, an environmental and social impact assessment (ESIA) was prepared and updated to meet international standards². A stakeholder engagement plan (SEP) was also developed to ensure discussions about the benefits of the project continued, especially in areas where there were concerns about the impact it would have. The results of the second round of engagement have been disclosed in a Public Consultation Report³.

¹ The European Investment Bank's Statement of Environmental and Social Principles and Standards (2009) and the World Bank Operational Policy 4.12 (2001).

² Cairo Metro Line 3 – Phase III Environmental and Social Impact Assessment Study, (Grontmij & EcoConServ, 2012)

³ Ibid

The stakeholder engagement process helped to inform the operator's approach to resettlement and its response to the economic displacement of certain groups. For example, informal shop owners (traders who sell goods and services but are not legally permitted to do so) were asked to move from the area in which they had been operating and risked losing revenue while they waited for the new metro line to open⁴.

This case study considers the employment opportunities associated with the construction of Line 3 - Phase III. It also considers youth employment and training, including on Line 2.

The approach to investment on Line 2 is also discussed. The European Bank for Reconstruction and Development (EBRD), as part of an integrated approach to investment in Cairo's transport sector (which comprises a series of investments across all modes of transport), is financing the rolling stock for Line 2. Part of the agreement is that contractors will provide training and employment opportunities during operation and maintenance.

Project Overview

Key words	Stakeholder engagement, youth, training
Sector	Transportation
Background	Cairo is one of the world's largest cities, with a population of just under 20 million. Its metro system has three lines. A fourth and a fifth are expected to be built in the future. This case study considers Phase III of Line 3, which is currently under construction, and Line 2, which is already moving passengers around the city. 500 million passengers and 12 million tons of freight are transported on the urban rail network each year.
Size	A total of EUR 2 billion, including: <ul style="list-style-type: none"> • EUR 44 million: grant from the European Union's Neighbourhood Investment Facility; • EUR 300 million: AFD – lead financing institution; • EUR 600 million: EIB – co-financing institution; • EUR 700-900 million: Government of Egypt; and • EUR 435 million: other contributors*¹.
Stage	<p>Line 1: Opened in 1987, final extension completed 1999.</p> <p>Line 2: Opened in 1996, final extension completed 2005.</p> <p>Line 3:</p> <ul style="list-style-type: none"> • Phase I (2007-2012) • Phase II (2009-2014) • Phase III (2016-2024) • Phase IV (still in planning) <p>Lines 4 and 5: expected in the future.</p>
Why of interest	<ul style="list-style-type: none"> • Identifies different types of stakeholders and how they may be impacted by the project, including a review and update of the approach to stakeholder engagement and identifying vulnerable people • An interesting approach to youth employment and training opportunities

⁴ Note: Whilst the relocation of a shanty-town impacted by the metro project forms an important part of the project, it has not been the subject of this case study.

^{*1} Neighbourhood Investment Facility: Operational Annual Report 2014, (European Commission, 2015)

Project objectives

- Increase access to public transport, provide an integrated transport system, and reduce traffic congestion
- Provide reliable and efficient transportation for more than 1.5 million people
- Create job opportunities during construction and operation
- Connect socially disadvantaged districts with the city centre and central business districts

Project Lifecycle Assessment

Project preparation – Independent consultants conducted a social inclusion baseline survey and a stakeholder engagement plan.

Project procurement – No relevant practices identified.

Construction – Jobs created for skilled and unskilled labour.

Project monitoring and evaluation – A mechanism will be put in place by NAT and partner non-governmental organisations (NGOs) to address grievances related to land acquisition and the construction phase of the project.

Project Description

Cairo is the largest city on the African continent. In 2016, just under 20 million people called the city home, up from 10 million three decades earlier. Cairo's rapid population growth, along with urbanisation, has created challenges for authorities. Reducing road congestion is one of the government's top priorities.

The Cairo Metro, which is the first network of its kind in Africa, was constructed to help address this issue. It provides an integrated public transport system and a modern and efficient service. It was considered as long ago as the 1930s, but detailed studies were not undertaken until 1975 and continued until 1981. The first line (Line 1) was opened in 1987.

Cairo Metro is owned by the National Authority for Tunnels (NAT), a government agency set up by the Ministry of Transport in 1983, and operated by the Egyptian Company for Metro Management and Operations (ECM). Foreign and local companies have been involved in the design and construction of the system.

Cairo Metro currently consists of three lines. Line 1 forms the backbone of the network. It passes through the most important residential and business districts of the city. Line 2 was opened in 1996 and connects to several other railway stations. Line 3, which is still being constructed, crosses Lines 1 and 2 in an east-west direction. It will extend from the north west of Greater Cairo at Imbaba to the north east at Heliopolis and will also serve the city's international airport. Line 3 is being built in four phases. Phase I opened in 2012 and was followed by Phase II in 2014. The third phase, which is the primary focus of this case study, is due for completion in 2024. A fourth phase is expected in the future.



Figure 1. Cairo Metro Network Line 1, 2 and 3 (partially operational).
Source: Egyptian Streets (<https://egyptianstreets.com/2015/10/25/9-things-you-should-know-about-the-cairo-metro/>)

Line 3 - Phase III will be approximately 17.7km of dual track and will comprise 15 stations, including eight underground stations, five elevated stations, and two street-level stations (indicated in green in Figure 1).

More than 1.5 million people per day are expected to use Line 3 in its entirety once it is completed. Of those passengers, 971,000 are likely to use the segment constructed during Phase III⁵.

Line 3 Phase III is an important component of the Greater Cairo Transport Master Plan. As well as connecting the east and west of the city, it will also provide two densely populated, socially disadvantaged districts (Imbaba and Boulak El Dakrou) with a safe and reliable service to the city centre and central business districts.

However, to construct the line, land will need to be acquired. This will lead to temporary and permanent economic and physical displacement. Building work will also create additional noise, dust and congestion. The operator should aim to mitigate the potential impact and disruption as much as possible during design and construction.

Line 3 Phase III addresses inclusivity in the Action Area of **Stakeholder Identification, Engagement and Empowerment**, which was taken into consideration in the early stages of the project. Stakeholder engagement was part of the environmental and social impact assessment (ESIA) process. It included the collection of detailed data and used the results of a sustainable livelihoods analysis (SLA) to identify vulnerable people and meet the lenders' environmental and social safeguard requirements.

This case study also considers youth employment and training. At the national level, according to the 2018 population estimate, there are 20.2 million young people aged between 18 and 29 in Egypt. They represent 21% of the total population.

The country's unemployment rate, recorded by Egypt's Central Agency for Public Mobilisation and Statistics (CAPMAS), was 10.6% in the first quarter of 2018, and dropped to 9.9% in the second quarter⁶. However, for young Egyptians between the ages of 15 and 24, the unemployment rate was 34.4% in 2017⁷, meaning that a larger portion of this group is unable to find work compared to the overall national employment rate.

A lack of professional skills, inefficient job-matching services, inconsistent information regarding the job market and poor quality of jobs are considered to be the main reasons for the high unemployment levels.

⁵ Cairo Metro Line 3 – Phase III Environmental and Social Impact Assessment Study, (Grontmij & EcoConServ, 2012)

⁶ Central Agency for Public Mobilization and Statistics, (Central Agency for Public Mobilization and Statistics, 2018)

⁷ Unemployment, youth total (International Labour Organization, 2017); Compared to the world average of 13.5%, World Bank Indicators, accessed 2018

NAT is seeking to address some of these problems through the work on Line 3 Phase III by insisting construction contractors invest time in training the workforce. On Line 2, as part of the EBRD's integrated approach (IA) to investment in Cairo's urban transport sector, training and employment opportunities are provided during operation and maintenance .

Therefore, this case study also covers the Action Area **Governance and Capacity Building** in relation to youth employment and training.

Key Practices Identified and Applied



STAKEHOLDER IDENTIFICATION, ENGAGEMENT AND EMPOWERMENT

Statement of the issue in relation to inclusion and brief introduction

The temporary footprint (needed for construction) and permanent footprint of the project will result in land acquisitions and lead to short- and long-term economic and physical displacement. The construction work will also generate noise, dust and congestion in some areas.



Figure 2. Indicative layout of Phase III of Line 3 showing neighbourhoods. Source: National Authority of Tunnels, Egypt (<http://www.nat.org/egy/english/phase3line3.html>)

Proposed route

Phase III of Line 3 will pass through a number of different neighbourhoods within the governorates of Cairo and Giza, as shown in the indicative layout in Figure 2. These neighbourhoods range from administrative and commercial districts and high-income residential areas, to low-income housing, agricultural and slum areas, and are summarised in the box below:

- Nasser - primarily an administrative and commercial sector. Includes the Supreme Court, cinemas and hotels.
- Maspero - a commercial and residential neighbourhood, informal expansion of shops. Highly populated, with a middle- and low-income population.
- Zamalek - embassies and higher income residential areas.
- Kit-Kat square - commercial area with street vendors, densely populated low-income housing.
- Sudan - commercial area and middle-income housing.
- Imbaba Airport - densely populated, low-income area with some areas resembling slums.
- El Bouhy - commercial and low- to middle-income housing. Market area.
- El Wehda - densely populated, low-income housing.
- Ring Road and Rod El Faraq Corridor – agricultural, low-income and slums.
- Twafiqiya - commercial area and middle- and low-income housing.
- Wadi El Nil - middle- and higher-income housing.
- Gamet El Doual El Arabia – commercial area and banks. Middle- to upper-income housing.
- Boulak el Dakroul - low-income housing, often informal. Market.
- Cairo University - low-income housing.

There is concern about the impact of construction work on the following areas:

- temporary and permanent economic and physical displacement, in particular in El Bohy, Maspero and the Ring Road, as well as Bolak Abu El Ela. A total of 1,382 people will be displaced by the project⁸, including tenants, owners, workers and squatters. This includes land, home and store owners who will be permanently displaced, tenants of shops who will lose their income in addition to being relocated, and workers who will

be affected by the change in their place of work. Commercial tenants and workers will be affected the most financially;

- restricted access during construction works, including to services such as health facilities;
- potential for subsidence of buildings from excavations and vibration;
- impact on the quality of life of residents who live next to construction sites, including concerns about noise and air quality;
- increased congestion during construction works due to restricted access and movement of construction vehicles;
- potential for accidents during construction (movement of construction traffic and equipment);
- potential for waste to accumulate, which is a health hazard; and
- visual impact of the above-ground stations.

Engagement with stakeholders and the collection of socioeconomic data has been a critical component of this project, as operators seek to limit the impact of the work on the community.

How inclusivity has been addressed

The identified practice is inclusive and extensive stakeholder engagement activities, with a focus on social groups that are economically and socially impacted by the project.

Line 3 Phase III is being developed under the ownership of NAT, with international funding from AFD and EIB. For that reason, the project was required to meet the environmental and social safeguarding standards of the two organisations. They included the EIB's Statement of Environmental and Social Principles and Standards (2009) and the World Bank Operational Policy 4.12.

The stakeholder engagement was led by two ESIA consultants engaged by the AFD. In 2011, the consultant EQI undertook the first stage of stakeholder engagement and field surveys, which provided information on the people and organisations who would be affected by the project. However, in 2012, the lenders identified gaps in the ESIA process when the results were measured against their own environmental and social safeguards, so AFD commissioned consultants Grontmij and EcoConServ to review and update the ESIA and the associated stakeholder engagement process (that is, they introduced a second stage).

The different stages of stakeholder engagement and data collection are outlined below:

⁸ Resettlement Action Plan Metro Line- Phase Three Line Three Final Report. (EcoConServ Environmental Solutions, 2015)

Stage 1:

- In October 2011, a field survey of 225 households (an average of 15 households within the proximity of each of the 15 Metro stations of Line 3 Phase III) was conducted by consultant EQI. It sought respondents' opinions on the planned Metro service and construction, and their concerns regarding the possible impact and disruptions;
- Three scoping meetings were held in October 2011 to provide members of the public with information on the project. The locations for these meetings were the Cairo governate (in Zamalek district) and Giza governate (one in Imbaba district and one in Mohandessin district, which includes El Bohy). They were open to all residents along the route of the proposed line; and
- A public disclosure meeting on the findings of the ESIA was held in December 2011. This meeting was held in Zamalek and was open to residents living along the route of the proposed line.

Stage 2:

To meet the lenders' environmental and social safeguard requirements, Grontmij and EcoConServ prepared an updated ESIA report and a stakeholder engagement plan (SEP) in 2012.

In the original ESIA, there was insufficient information on vulnerable groups. Therefore, the updated process sought to provide more detail on the people who would be affected and to classify vulnerable groups in line with international best practice. That required consideration of groups such as indigenous people, ethnic minorities, women, migrants, young people and the elderly. The methodology used to identify vulnerable groups and to assess the project's impact on them was based on the sustainable livelihoods approach (SLA), described in greater detail below.

The updated stakeholder engagement process, as recorded in the SEP, sought to address information requests and issues deemed to have not been fully addressed during the first stage of the consultation process, according to the ESIA consultants. It also aimed to provide new information (e.g. exact station sites and alignments of the metro line) not previously presented to stakeholders. In particular, the new engagement process had to meet the social safeguard requirements of the EIB. This included adhering to European Union standards, as set out in the Aarhus Regulation, which grants the public certain rights regarding access to information, participation and access to justice in governmental decision-making processes⁹.

⁹ The Aarhus Convention is a multilateral environmental agreement. It grants the public rights regarding access to information, public participation and access to justice in governmental decision-making processes on matters concerning the local, national and transboundary environment. It focuses on interactions between the public and public authorities.

The SEP prepared by Grontmij and EcoConServ also referenced the following principle in relation to inclusivity:

*"Engagement must be inclusive: Care should be taken to identify, invite and engage with all categories of local stakeholders, particularly those categories (e.g. special needs citizens, local transportation providers, low-income households) who may be unable or intimidated to attend public consultations and lack effective representation. Special attention should also be given to those who might be affected negatively by the project, and that their concerns are taken into consideration."*¹⁰

A report with final recommendations for sustained engagement with stakeholders through to the completion of Line 3 Phase III was prepared and disclosed by the ESIA consultant following the second stage of stakeholder engagement activities¹¹.

Implementation**Multiple data collection methods**

People who were most likely to be affected by construction activity were contacted directly as part of the ESIA process undertaken by EQI, and Grontmij and EcoConServ, and a large volume of quantitative and qualitative data from various primary and secondary sources was accessed to better understand different social groups. Information from secondary sources, such as census data, was collected from various government organisations. Primary data collection from stakeholders was also undertaken, in two stages, to obtain baseline data, to identify vulnerable groups, and to garner people's perception of the project's potential impact.

The initial ESIA consultant, EQI, used a structured questionnaire to collect quantitative data in the field. The questionnaire content covered:

- basic information about the people living and working near the construction sites, the beneficiaries and communities;
- people's perception of the project and its anticipated impact;
- the current type of transportation used; and
- relocation activities.

The questionnaire also asked for the community's views on the proposed project and how willing they were to support it. Only residents were interviewed during stage one.

¹⁰ Cairo Metro Line 3 – Phase III Environmental and Social Impact Assessment Study, (Grontmij & EcoConServ, 2012)

¹¹ Ibid

A second round of structured questionnaires was developed to include people who missed out during the first survey, for example, vendors, shopkeepers and students. This process was led by Grontmij and EcoConServ.

The questions guiding the survey were:

- which policies and legislation have influenced the project?
- which socioeconomic factors should be considered?
- how do people feel about the project?
- how will the work affect them?
- how can the project be implemented with minimal disruption to the community?
- what mechanisms need to be applied to create an appropriate stakeholder engagement plan?
- what is the capacity and organisational framework that will be applied during the implementation of the stakeholder engagement plan?

225 residents and 135 vendors, shopkeepers, workers and students were interviewed between the first and second stages of consultation, despite some shortcomings in the way relevant social groups were represented.

Sustainable Livelihoods Approach

The original ESIA did not meet lender requirements because of a gap in identifying vulnerable groups of people. Therefore, one of the key aspects of the work in stage two was addressing that concern. The methodology used to identify vulnerable groups and to assess the potential impact on them was based on the sustainable livelihoods approach (SLA)¹², which describes the context, motivations and resources of vulnerable households.

It included:

1. assets (social, physical, economic, human and natural assets);
2. risks and vulnerability surrounding individuals; and
3. policies and organisations that govern the implementation of mitigation measures.

The level of vulnerability and the severity of the impact was assessed by reviewing the individual's asset base. If a person has fewer assets, they also have less choice, making it more difficult for them to cope. More attention should be paid to these groups when compensation schemes and/or mitigation measures are being designed.

¹² The Sustainable Livelihoods Approach (SLA) is a method of analysing and changing the lives of people experiencing poverty and disadvantage. It is a participatory approach based on the recognition that all people have abilities and assets that can be developed to help them improve their lives and it allows for the identification of priorities for development activities. The approach has been adapted by various International Finance Institutions.

Vulnerable groups were included in the ESIA report (2012) if they would have been in need of resettlement because of the project, if their livelihoods were at risk, or because they might be affected disproportionately by environmental impacts such as waste, emissions or noise. The consultants believed certain groups would be more vulnerable to environmental impact than others due to higher level of exposure or lack of alternatives or coping strategies. Examples include people who work in shops and have no insurance or health care coverage, people who sell goods in the streets that would be blocked during construction, families in El Bohy market which was to be demolished, and students who enrolled in schools close to their house in Imbaba and would now have to relocate.

Resettlement Action Plan

The ESIA report identified the need for a Resettlement Action Plan (RAP) to make provisions for the people affected economically or physically by the development, including vulnerable groups.

A RAP, commissioned by the EIB, was prepared by EcoConServ in 2015. The RAP met national and EIB standards and requirements. The RAP study team included two experts who specialised in gender issues.

A gap analysis between national requirements and EIB requirements for resettlement indicated several divergences, including the following that are not provided for in national law and, therefore, were addressed in the RAP:

- resettlement assistance;
- full market replacement value;
- squatters' rights;
- income disturbance allowances; and
- vulnerable groups.

By reviewing the gaps between national and international standards, the RAP covered a wider range of people who were entitled to compensation. The compensation framework identified in the RAP covered compensation for all types of Project Affected Persons (PAP)¹³ in line with EIB requirements (such as squatters, disturbance allowances, etc.).

The RAP study team undertook further consultation and detailed data gathering via socioeconomic questionnaires, focus group discussions and semi-structured interviews.

¹³ A PAP in this context refers to all persons impacted by the involuntary resettlement, land acquisition, relocation, or loss of incomes that come about due to a project. This includes all members of a household (women, men, girls, boys, and several generations in the case of extended households).

The following activities were conducted during the preparation of the RAP for the PAPs:

- public consultation was conducted with the PAPs for El Bohy in February 2013 where all PAPs were invited. The total number of participants was 109. The majority of participants were illiterate. Women and people living in extreme poverty were invited. El Badr mosque played a major role in reaching the vulnerable groups;
- meeting with the Board of Directors of El Badr Mosque, El Bohy in February 2013;
- public consultation with PAPs in Bolak El Dakrou in February 2013. 44 people took part and again, the majority of participants were illiterate;
- public consultation with the PAPs in Bolak Abu El Ela in February 2013. 18 shop owners and tenants attended;
- meeting with Dar El Tefl School Board members in March 2013; and
- group discussion with owners and tenants of a building to be affected.

Questionnaires were developed with input from the EIB, and pre-tested on people from the community. The test phase was followed by the completion of the questionnaires. The questionnaires were used to obtain data on PAPs, regardless of the legal status of the affected persons and the affected asset.

Specialist training on data collection

Local surveyors (enumerators) were employed to carry out the RAP surveys, under the supervision of the RAP consultant's household survey quality assurance specialist. Before launching the surveying process, surveyors received intensive training on:

- how to collect data;
- communication skills;
- how to fill in questionnaires with the PAPs; and
- the ethics of data collection.

Following the training, the surveyors were evaluated and a shortlist of data collectors was developed.

Disaggregation of vulnerable groups

In parallel with the data collection process, databases were designed and constructed. During the data collection phase, the completed questionnaires were monitored by data monitoring officers. After sending the questionnaires to the office, they were checked again for quality. Once quality was assured, the data was entered into the designed software. The household survey experts were responsible for analysing the data and interpreting the findings, with involvement from the team of resettlement specialists.

From a vulnerability perspective, the RAP states that the study team worked to ensure disaggregation of the various social groups by age, gender, occupational status, educational status, livelihoods security, access to physical

assets, etc. The level of vulnerability of the affected persons and the severity of the impact was then assessed and determined by looking into the PAPs' asset base using the SLA approach.

Focus group discussions

In addition to the above, the study team also used qualitative research methods aimed at assisting the study team in gaining an in-depth understanding of the current socioeconomic and legal conditions of the PAPs, their sources of livelihood, as well as their compensation preferences. This included focus group discussions (FGDs) with the following:

- people earning low incomes who receive financial support from El Badr Mosque;
- people and their relatives who rely on the health centre at El Badr Mosque;
- Bolak Abu El Ela shop owners, tenants and workers;
- female heads of households at the El Bohy market; and
- widowed women who raise their children with no other source of income except selling goods in the street.

Semi-structured interviews were also held with NAT, representatives of the governorate and the municipality, NGOs, mosques and health centres that may be affected by the project, as well as political parties and community leaders.

Public stakeholder meetings

Stakeholder engagement meetings were also undertaken during the first and second stages of the stakeholder engagement process. Stakeholders included:

- local residents (owners and tenants) in nearby communities and commuters travelling to/from these areas;
- small business owners/managers and leading employers in the affected communities;
- community-based NGOs and informal groups of local citizens;
- real estate and farm property owners near, or directly impacted by, construction;
- public and private transportation providers (such as bus, micro-bus, tuk-tuk) that serve nearby communities;
- school, youth centre, and hospital administrators in community facilities;
- government ministries; and
- administrative officials and municipal executives in the affected areas of the Cairo and Giza governorates.

In the first stage of consultation, three public meetings were held in the Cairo and Giza governates to share information about the project and ask for people's feedback, and one public meeting was held to disclose the findings of the initial ESIA.

Stakeholder Engagement Plan

As part of the second stage, the ESIA consultants Grontmij and EcoConServ reviewed the original stakeholder engagement process and prepared a SEP, which recorded the activities already undertaken, proposed new engagement opportunities and made recommendations for work to be led by NAT during the construction phase of the project.

The methods for engagement identified in the SEP and implemented in 2012 included initial meetings with local officials and responsible authorities to present and finalise the plans, and the rationale and proposed schedule for upcoming stakeholder engagement activities.

The ESIA consultants' review of the initial stakeholder engagement process found there was general acceptance and appreciation of the Line 3 Phase III work, with the exception of two communities, where complaints and resistance had emerged. Whilst overall support for the project had been high in lower income neighbourhoods, where they welcomed easier access to the city centre, in the higher income area of Zamalek, residents opposed the extension of the Metro because they did not believe they would use it. They also worried about a potential increase in traffic congestion during the construction phase and the impact of connecting their neighbourhood to lower income areas. In Imbaba/Al Bohi, people were concerned that the over-ground structures that had been proposed were intrusive and that they would not be able to avoid severe traffic congestion during construction.

The ESIA consultants advocated an open dialogue with the communities, and the proposed approach was planned in close cooperation between the ESIA consultants and NAT. It was agreed that two additional public meetings should be held, one in each area. The wider public, including the following people, also attended:

- members of low-income communities;
- those without a high level of education;
- unemployed housewives;
- workers, craftsmen, drivers, and students; and
- farmers from the Ring Road.

Providing the community with knowledge and resources

Prior to the meetings, factsheets on the design, alignment, construction timeframe and the land or property required for each station and segment of Line 3 Phase III, were disseminated in print and via the NAT website.

Draft plans were presented to communities, covering monitoring and risk mitigation, and the grievance process that would be managed by NAT and partner NGOs.

A public consultation document was prepared and disclosed following the two public meetings. It reports that attendees appreciated being given the opportunity to engage. In Zamalek, residents established a relationship with a NGO that was active in the area and offered to act as facilitator for channelling complaints to NAT.

The ESIA consultant recommended that the non-technical summary of the ESIA, the consultation factsheets and contact information for Line 3 Phase III construction issues and complaints should be made available via the NAT website (www.nat.org.eg) to enable people to speak directly with NAT.

The ESIA consultant also suggested that NAT and local government officials continue to make public service announcements and share construction plans with communities, from the start to the end of the project, and that NAT should establish an ombudsperson and public liaison office and maintain a partnership with community-based or advocacy NGOs in communities that had concerns.



GOVERNANCE AND CAPACITY BUILDING

Statement of the issue in relation to inclusion and brief introduction

Youth unemployment and the lack of training opportunities are significant issues in Cairo. The youth (15 to 24-year-olds) unemployment rate in Egypt was 34.4% in 2017¹⁴. This is, in part, because the education and training system has failed to equip young people with skills that match the jobs available. It can also be explained by the limited job opportunities and inadequate youth employment regulations.

According to the ESIA report¹⁵, 50% of the total population in the area surrounding Line 3 Phase III is 15 to 45 years old. The project area is also known to have high unemployment amongst young people¹⁶, which reflects the national situation.

¹⁴ Unemployment, youth total (International Labour Organization, 2017)

¹⁵ Cairo Metro Line 3 – Phase III Environmental and Social Impact Assessment Study, (Grontmij & EcoConServ, 2012)

¹⁶ Out of this number, 1/3 are inactive non-students, and the remaining 2/3 are unemployed non-students.

How inclusivity has been addressed

The identified practice is the provision of employment, expertise and training opportunities to youth and other vulnerable groups throughout the project lifecycle.

The construction of Line 3 Phases I and II generated numerous construction-related jobs and addressed unemployment issues for the unskilled workers, highly skilled workers and administrative staff involved in the project.

This has been achieved through an inclusive procurement process, whereby bidders are encouraged to make training available as part of the tender process, through a requirement for construction contractors to facilitate training resulting in specific qualifications within a stipulated period of time and through a bespoke Inclusion Action Plan involving the project's key stakeholders.

According to NAT's latest records, 3,000 to 4,000 job opportunities will be provided during the construction of Line 3 Phase III, and more than 1,500 permanent jobs will be created during the operational stage¹⁷.

Implementation

Inclusive procurement process

Line 2 of the Metro is one of the projects identified under the EBRD's Integrated Approach (IA)¹⁸ to Greater Cairo's urban transport sector, where identified projects are required to introduce youth inclusion through providing an inclusive procurement process. As part of the tender process, bidders are encouraged to make onsite training placements available, in partnership with participating local vocational schools and job centres.

Economic inclusion is integral to development for the EBRD, particularly in view of growing youth unemployment, the low participation of women in the workforce in some countries of operation, and the stark differences in economic performance between its regions. This element of the project has, therefore, been designed to promote inclusivity by creating onsite training opportunities for unemployed young people.

¹⁷ Interview with Dr. Eng Ashraf A.M. Abu-Krishna (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT).

¹⁸ Egypt: Cairo Integrated Transport Project - Inclusion Component (European Bank for Reconstruction and Development, 2015, October 22)

Inclusion Action Plan

The EBRD has engaged with the main stakeholders – Egyptian Company for Metro Operations (ECM), Industrial Training Council (ITC), Misr El Kheir and the International Labour Organization (ILO) to discuss the possibility of receiving practical assistance to support training initiatives. The EBRD has also commissioned a consultant to provide an overview of youth unemployment in Egypt, assess employment and training opportunities during operation and maintenance, and develop a bespoke action plan. An Inclusion Action Plan considers the following aspects:

- The number of jobs and onsite training opportunities that will become available as part of the maintenance contracts;
- Development of a clear inclusion methodology and bespoke action plans, involving key stakeholders (for example, client(s), relevant ministries, the National Procurement Office, vocational training institutions, job centres, main international and local contractors and sub-contractors) to open up onsite training opportunities (and related employment opportunities) to young people. The plans should draw on models of international best practice and respond to the specific circumstances and requirements of the construction industry and other local stakeholders in Egypt so as to be relevant and effective in that context. Each action plan also needs to include cost models and specific recommendations as to how to integrate the inclusion component within the overall project design and delivery plan.
- Identification of project delivery, capacity building and monitoring support required throughout project implementation. This should include:
 - i. specific technical support to the project proponent and key stakeholders to ensure the effective implementation of the inclusion methodology;
 - ii. capacity building to the project proponent and relevant stakeholders; and
 - iii. ongoing impact monitoring (including the number of young women and men trained, skill levels achieved, and - where possible - future progression) to establish the impact achieved, to identify lessons learned, and recommend actions to optimise the methodology.
- Direct engagement with the National Procurement Office in Egypt to integrate similar inclusive procurement models across other areas of public procurement in the country in order to achieve wider systemic impact¹⁹.

¹⁹ Ibid


The EBRD investment aims to open up economic opportunities for unemployed young people (men and women under the age of 25) by introducing a requirement in the procurement process that encourages private sector suppliers to offer onsite training opportunities to unemployed young people in subjects related to rolling stock maintenance, and developing vocational training curricula in disciplines that are directly related to the investment.

Training by construction contractors

According to the interview conducted, there is a plan to encourage more women to join the project and provide training programs for unemployed young people. However, one of the difficulties faced is the lack of specialised institutions in the country that can provide the level of expertise required for roles in operations and maintenance²⁰.

For Phase III of Line 3, the construction contractors and sub-contractors are responsible for facilitating the training process and this is stipulated in the agreement between NAT and the contractors. Specific qualifications must be achieved within a fixed time period.

Benefits Realisation

Identified benefit	Benefit description
 <p>Integration of small business opportunities</p>	<p>People living in areas where the line is proposed, such as the Ring Road, have started to develop small businesses in the area (i.e., cafes, restaurants) after they were informed of the proposed Line 3 Phase III location. The businesses will serve the workers and the passengers in the future^{*1}.</p>
 <p>Increasing affordability and accessibility</p>	<p>Metro Line 3 increases accessibility to public transportation and provides access to jobs and health centres in the centre of town. For instance, people in Boulak El Darkrou and Imbaba feel that the project will provide better mobility for its residents.</p>
 <p>Job creation and equal access to labour market opportunity</p>	<p>The Metro system has generated numerous construction-related jobs and addressed unemployment issues for the unskilled workers, the highly skilled workers and the administrative staff.</p> <p>According to the interviewee, 3,000 to 4,000 job opportunities will be provided during construction work in Phase III of Line 3 and more than 1,500 permanent jobs will be provided in operational stages^{*2}.</p>
 <p>Technical literacy and knowledge sharing</p>	<p>Contractors are required to provide training opportunities during the construction of Line 3 Phase III. However, it is too early to assess the outcome of this requirement. It is also too early to assess the outcome of the EBRD strategy for training in relation to the provision of rolling stock for Line 2.</p>
 <p>Social equity and social stability</p>	<p>Given the demographic context of Cairo, the project has elements of inclusivity, covering improved mobility and job creation to lower income neighbourhoods.</p>

^{*1} Cairo Metro Line 3 – Phase III Environmental and Social Impact Assessment Study, (Grontmij & EcoConServ, 2012)

^{*2} Interview with Dr. Eng Ashraf A.M. Abu-Krishna (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT).

²⁰ Interview with Dr. Eng Ashraf A.M. Abu-Krishna (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT).

Stakeholders

Institutional stakeholders and partners	Role
National Authority for Tunnels (NAT)	NAT is a government agency under the jurisdiction of the Ministry of Transport, incorporated in 1983. It is the entity that owns the Metro system and is responsible for planning and construction of metro lines in Egypt, including Metro Line 3 Phase III.
Egyptian Company for Metro Operations (ECM)	ECM is the operator of the metro system, and therefore will be responsible for the operation of Line 3 Phase III when construction is complete. ECM will also be responsible for the project's environmental performance once the line becomes operational.
Ministry of Transport	The Ministry of Transport is responsible for developing plans to establish subway networks.
Ministry of Finance	The Ministry of Finance transfers funding to NAT to expand the Metro and pay for the purchase of supplies.
Ministry of Education and Technical Education	It is responsible for developing the education system in Egypt and providing qualified workers to the job market.
European Investment Bank (EIB)	As the co-financier for the project, EIB approves the ESIA as per the requirements of the finance package.
Agence Française de Développement (AFD)	As the lead financier for the project, AFD approves the ESIA as per the requirements of the finance package.
Industrial Training Council (ITC)	ITC is responsible for the development and award of vocational competence-based qualifications in Egypt.
Egyptian National Railway	Egyptian National Railway provided for an annual concession fee of USD 1.79 million (LE 32 million), later amended in 2009 to 25% of metro operating annual income until the opening of Line 3.
Egyptian Environmental Affairs Agency (EEAA)	EEAA is the agency responsible for ensuring that an environmental and social assessment is conducted in compliance with national legislation.
SYSTRA	SYSTRA is a transport planning consultancy. SYSTRA's recent contracts for Line 3 include project management and works supervision for construction Phases I and II, and preparing basic designs and tender documents for Phases III and IV of Line 3.
EQI	Consultants hired by AFD to conduct the initial ESIA.
Grontmij and EcoConServ	External consultants hired by AFD to update the ESIA and stakeholder engagement process to support project planning.

Key beneficiaries	Role
Low-income people	Low-income groups were given particular attention during the demographic data collection process and the stakeholder engagement process. The project will link lower income neighbourhoods to the city centre.
Vulnerable groups	The team conducted a study that involved collecting data that could help identify vulnerable groups and those that could be economically and physically displaced by the project. This included, for example, street vendors who were compensated through the RAP process and through the provision of another market to allow them to restart their business; and informal shop owners not covered by insurance or health care who were paid a percentage of their lost business revenue* ¹ .

*1 The exact amount of compensation could not be retrieved.

Lessons Learned

Success factors

The approach to the ESIA process and stakeholder engagement for Line 3 Phase III, driven by the need to fulfil lender requirements, has resulted in **the collation of a comprehensive socioeconomic baseline dataset** and the implementation of an **extensive stakeholder engagement process**. In the interview, it was identified that this is the first time that such an extensive undertaking in relation to stakeholder engagement for an infrastructure project had been conducted in the country, to ensure that the concerns of all the communities potentially affected by the project had been heard²¹.

The review of the stakeholder engagement process

provided an opportunity to identify gaps in the process to date that could be addressed through further consultation. The secondary round of public consultations was reported by the ESIA consultant to have been well received by the two communities that had previously been against the project and helped gain acceptance of the work, as well as identify mitigation measures to be incorporated into the project design and construction phase.

The incorporation of international standards helped set objective benchmarks for the project, which focused on all vulnerable groups in relation to the requirement for compensation for economic and physical displacement. As such, a RAP to EIB standards was prepared in 2015 and this included additional stakeholder engagement with affected parties, as well as detailed questionnaires to collect disaggregated data on project affected persons.

Both the ESIA and RAP process used the SLA approach to identify vulnerable groups, so that they could be catered for in terms of engagement and so that their needs could be incorporated into the planning process.

In relation to youth employment, **construction work suppliers are contractually required to provide proper expert knowledge** to the workers. This, supplemented by necessary training, facilitates the transfer of knowledge and the upskilling of workers²². The government's wider initiatives to improve vocational training provide an opportunity to align training with large infrastructure project needs.

In respect of Line 2 and youth employment, the EBRD's IA encourages transport infrastructure projects in Cairo to provide **specific requirements for training within contracts**. The EBRD has approved a multi-year EUR 750 million investment, and one of the projects falling under this IA approach is the Cairo Metro Line 2. The contract for the procurement of additional trains promotes youth inclusion by encouraging private sector contractors to open onsite training programs for the youth to help enhance their skills and improve employability²³.

²¹ Interview with Dr. Eng Ashraf A.M. Abu-Krishna (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT).

²² Ibid

²³ Strategy for Egypt: As approved by the Board of Directors at its meeting on 8 February 2017. (European Bank for Reconstruction and Development, 2017)

Key challenges

During the data collection exercise to identify vulnerable groups, **not all stakeholders fully understood the purpose of the survey, while some were reluctant to provide personal data** (e.g. incomes). Therefore, they were not always supportive or honest in their answers, which can compromise the integrity of the data. The poor quality of collected data can lead to a costly and time-consuming exercise of validating data accuracy²⁴.

The **evaluation mechanism for projects needs to be more transparent**. For instance, it was reported in the interview that quarterly monitoring reports were prepared by NAT and submitted to the lender for Line 3 Phase III, however, these are not made available to the public.

Displacement of people because of the project was challenging, especially in neighbourhoods such as Zamalek, where residents identified that they would not use the Metro. Identifying these issues and fully engaging with these residents through further stakeholder engagement was useful to understand and address these concerns.

While contractors are encouraged to hire young unemployed people, there is no legal requirement (either in local law or in the loan documents between the government and the financing institutions) which makes this a binding obligation.

²⁴ Interview with Dr. Eng Ashraf A.M. Abu-Krishah (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT).

References

01. CEIC. (2016). *Egypt Labour Force Participation Rate*. CEIC Data's Global Database. Retrieved from <https://www.ceicdata.com/en/indicator/egypt/labour-force-participation-rate>
02. Central Agency for Public Mobilization and Statistics. (2018). *Press Release*. Central Agency for Public Mobilization and Statistics. Retrieved from http://capmas.gov.eg/Pages/GeneralNews.aspx?page_id=1
03. EcoConServ Environmental Solutions. (2015). *Resettlement Action Plan Metro Line- Phase Three Line Three Final Report*. European Investment Bank. Retrieved from http://www.nat.org.eg/arabic/tender/Report%20final%20line3_%20phase3English.pdf
04. Egypt National Authority for Tunnels. (2013). *Cairo Metro Project*. National Authority for Tunnels (NAT). Retrieved from <http://www.nat.org.eg/english/index.html>
05. European Bank for Reconstruction and Development. (2015a). *Cairo Metro Line II Purchase of trains*. Cairo: European Bank for Reconstruction and Development. Retrieved from <https://www.ebrd.com/work-with-us/projects/psd/cairo-metro.html>
06. European Bank for Reconstruction and Development. (2015b). *Cairo Urban Transport Integrated Approach Inclusion Element*. Cairo. Retrieved from <https://www.ebrd.com/work-with-us/procurement/pn-49551.html>
07. European Bank for Reconstruction and Development. (2015, October 22). *Egypt: Cairo Integrated Transport Project - Inclusion Component*. European Bank for Reconstruction and Development. Retrieved from <https://www.ebrd.com/work-with-us/procurement/pn-49551.html>
08. European Bank for Reconstruction and Development. (2016). *Framework Contract: Cairo Urban Transport Integrated Approach Inclusion Element Final Repprt*. London : Avistun Ltd.
09. European Bank for Reconstruction and Development. (2017). *Strategy for Egypt: As approved by the Board of Directors at its meeting on 8 February 2017*. European Bank for Reconstruction and Development. Retrieved from <https://www.ebrd.com/what-we-do/strategies-and-policies/egypt-strategy.pdf>
10. European Commission. (2011a). *Cairo Metro Line 3 - Phase III*. International Cooperation and Development. Retrieved from https://ec.europa.eu/europeaid/blending/cairo-metro-line-3-phase-iii_en
11. European Commission. (2011b). *International Cooperation and Development*. Cairo Metro Line 3 - Phase III. Retrieved from https://ec.europa.eu/europeaid/blending/cairo-metro-line-3-phase-iii_en
12. European Commission. (2015). *Neighbourhood Investment Facility: Operational Annual Report 2014*. Brussels: European Commission. Retrieved from <https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/neighbourhood/pdf/key-documents/nif/20151022-2014-report-optimised-final.pdf>
13. European Investment Bank. (2009). *The EIB Statement of Environmental and Social Principles and Standards 2009*. European Investment Bank. Retrieved from http://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf
14. Grontmij & EcoConServ. (2012). *Cairo Metro Line 3 – Phase 3 Environmental and Social Impact Assessment Study*. Egypt. Retrieved from <http://www.eib.org/attachments/registers/47052553.pdf>
15. Institute of National Planning Egypt. (2010). *Egypt Human Development Report*. Cairo. Retrieved from http://hdr.undp.org/sites/default/files/reports/243/egypt_2010_en.pdf
16. International Labour Office. (2017). *Towards Evidence-Based Active Labour Market Programmes in Egypt: Challenges and Way Forward*. Impact Report Series, Issue 4. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_545383.pdf
17. International Labour Organization. (2017). *Unemployment, youth total as % of total labour force ages 15-24*. Retrieved from <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>
18. The World Bank Group. (2001). *Operational Manual OP 4.12 - Involuntary Resettlement*. World Bank. Retrieved from <https://policies.worldbank.org/sites/ppf3/PPFDocuments/090224b0822f89db.pdf>
19. The World Bank Group. (2014). *Cairo Traffic Congestion Study*. Retrieved from <https://openknowledge.worldbank.org/handle/10986/18735>

Interviews

Interview with Dr. Eng Ashraf A.M. Abu-Krishna (2018, June 30). Tunnelling & Construction Consultant, Vice Chairman, National Authority for Tunnels (NAT). (T. Ashour, Interviewer).

