Tbilisi: Analysis of Parks and Recreational Assets
A Summary Report

Purpose and scope
A World Bank team met with Tbilisi’s Mayor and Deputy Mayors in December 2017 to discuss the newly elected Administration’s strategic vision and policy priorities for the next several years. One of the priorities identified at that time was to improve quality of life, including through enhancing the quality and accessibility of the city’s parks and other recreational amenities.

Pursuant to that discussion, the World Bank committed that a team would analyze the city’s parks and recreational amenities and identify opportunities to improve those assets, for the broader goal of increasing positive economic and social impact. This type of analysis aligned well with the Mayor’s vision of developing and marketing Tbilisi as a green city, one of the main pillars of the city’s recently prepared master plan that is currently under review.

Improvement of parks and recreational assets can significantly contribute to addressing major policy challenges and unlocking new opportunities for economic development of Tbilisi. Green assets can contribute to health and quality of life of the citizens, help mitigate air pollution, and can increase the city’s resilience to natural disasters (e.g. through designing parks as flood plains or designated meeting spots). Parks and recreational assets can boost the urban economy by enhancing attractiveness of Tbilisi to tourists and to talent considering relocating to or starting a business in Tbilisi. Additionally, parks and recreational assets can fund themselves, insofar as they can substantially enhance land and property values that the city can capture through land and property taxes, or imposition of special levies.

Based on these considerations, the World Bank has offered to support the administration by providing analytical insights into coverage, accessibility, quality and patterns of use of existing parks and recreational assets. The ambition of the conducted work is to inform investment prioritization by the city administration in the short run, achieve better quality of service for the population in the medium term, and contribute to measurable improvements in quality of life and health of residents, as well as in tourism attractiveness and overall economic competitiveness of Tbilisi in the long run.

This report presents a short overview of the results of the conducted analytical exercise, and recommendations that it has informed. Attached to this report is the full package of analytical outputs, and data collected by the world bank team. The package includes the following outputs:

- The final presentation (.ppt) of analytical results including maps and videos.
- The results of analysis of coverage/accessibility of parks, playgrounds and sports fields including accessibility heatmaps, and geospatial data used for the analysis (shapefiles).
- Assessments of quality of parks and recreational assets including:
  - A presentation containing detailed assessment of 30 largest green spaces in Tbilisi
  - Materials showing the results of assessment of quality of local parks, playgrounds and pitches in Saburtalo district including: tables with results of assessment, maps of asset quality, geospatial data (shapefiles)
- Results of analysis of use of largest parks and green spaces using social media and smartphone data including, the analytical report, maps and data visualization videos.
The detailed materials elaborating the recommendations of this report including the maps of potential expansion parks and recommendations for improvement of each of the top 30 parks and green spaces base on analysis of their quality and use patterns.

Methodology of analysis

This analytical activity looked at three types of assets, and conducted several analytical exercises with regard to each of them.

The following assets were the subject of analysis:

- Playgrounds – organized spaces with amenities for young children to play
- Sports pitches – including football fields, basketball and tennis courts with different types of surfaces.
- Parks, which we defined not by their formal status, but rather by the suitability of their space and the existing form of use by the people. Among the parks which we distinguished between two types of parks:
  - Destination parks – large parks with diverse assets and activities, to which people travel for leisure. We defined destination parks as 30 largest organized green spaces in the city.\(^1\)
  - Local parks – smaller organized green spaces that are in close proximity to residential areas, offering basic amenities, used by the local residents mostly arriving on foot, offering relief/escape from the city.

The following analytical techniques were deployed to analyze these assets:

1. Analysis of physical accessibility\(^2\) of assets was conducted using Geo Information System (GIS) modeling, using information collected from Open Street Map. The input data about the assets was substantially improved in the course of two marathons that were conducted in Tbilisi and Washington DC. Data was then validated by local experts. This analysis covered all types of assets considered.
2. Analysis of quality of parks and recreational assets. This exercise included field visits to the assets, and recording of their physical characteristics based on a structured framework. This analysis covered all destination parks, and a sample of local parks, playgrounds and sports fields.
3. Analysis of use. This exercised used social media and smartphone geo referencing data, to reveal spatial and temporal patterns of use of parks, as well as other parameters of use. This analysis only included destination parks.

Key findings

Playgrounds:

- While available data unfortunately didn’t allow for robust analysis of access to playgrounds, the field observations suggest that availability of playgrounds is not a major issue. However, collection of better geospatial data is required to verify this finding and ensure that there are no underserved neighborhoods.
- Field observation review, that quality and maintenance of the playgrounds can be improved. More specifically a number of newly build playgrounds appear to be made from cheap materials (plastic),

\(^1\) The definition of the major parks may not match the formal designation of parks in the city.

\(^2\) For the purpose of this work accessibility of assets is understood only as physical access via roads and sidewalks.
and many amenities on these playgrounds are broken or damaged relatively soon after they have been built. This raises questions both about the kinds of playgrounds that the city is purchasing, and about the quality of maintenance of these assets.

Sports Pitches:
- The city is well served with various sports fields. None of the densely populated areas of the city appear to be underserved.
- Assessment of quality of sports fields has revealed that a lot of them are relatively new, have modern surfaces (AstroTurf, rubber carpet etc.), and most are decently maintained.

Local Parks:
- Accessibility analysis has revealed, that while there are quite a few local parks across the city a number of densely populated neighborhoods are underserved by local parks. Such neighborhoods are concentrated in the North/ North East of the city, as well as in the South -East of the city. (Please consult the maps of local parks accessibility in the attached folder)
- The quality analysis of a sample of local parks has revealed substantial disparity in quality of amenities, planning and maintenance of parks. While some of the local parks located in newer neighborhoods tend to be renovated and well maintained, others (located more peripherally, but not exclusively so) are dilapidated, and require major improvements.

Destination Parks
- Most of the 30 largest parks and green spaces in the city are concentrated close to the city center, or on the eastern and western periphery of the city center. At the same time the north and the south of the city are underserved with large parks.
- Analysis of the use of large parks has underlined that parks vary greatly in terms of intensity, geographical and temporal patterns of use:
  - Parks closer to the city center are generally used most intensely, however there are several parks in more peripheral locations that are popular.
  - Several parks including Lisi lake and Mtatsminda can be classified as "isolated", which means that while they are not used very intensively they offer a high level of engagement for the visitors (e.g. there are few visitors but they are very likely to post on social media when in the parks).
  - Territory of some of the most popular parks is used unevenly — social media activity is concentrated in areas that represents a small portion of the park (this is true for Mziuri park, and Botanical Garden. This suggest that there is scope for better utilization the full territory of the park.
  - Overall parks in Tbilisi do not have strong identities, do not exist on people’s mental maps. Parks are very rarely mentioned in social media posts, and do not appear to have a strong image attached to them. (Turtle Lake park is the only one that is referenced, but still in a very small number of posts).
  - Programming of parks, and promotion of the events held in the parks appears to be ineffective: social media activity in the parks doesn’t increase substantially during event.
- Quality of large parks varies, while some are relatively well maintained (Lisi Lake, Mtatsminda park), others are partially in disrepair (Mziuri Park, Rike Park), and others green spaces considered operate largely like informal un-planed parks (Old Hippodrome, Digomi Forest). Some correlation between the quality of amenities and physical space of the parks can clearly be observed. Overall the quality
of park space presents a substantial room for improvement in terms of increasing the variety of activities available in parks and enhancing attractiveness of parks.

For maps, and data supporting these findings please refer to the attached final presentation and additional materials.

Recommendations

Based on the assessment, the World Bank team proposes the following priority actions that are consistent with the vision of Tbilisi as a Green city and with the City Administration's priorities of improving the parks and green spaces, improving quality of life of the city population and enhancing attractiveness to visitors. The recommendations below combine the proposals for en chaining the coverage of services through development of new assets, with recommendations to maximize the utilization and the impact of existing assets from improving quality and other actions.

Playgrounds

- The quality of the newly built playgrounds should be increased, because the durability of recently build playgrounds appears to be poor, and maintenance is likely to be costly. This may should require revisiting the procurement procedures. Where possible within the regulations quality of amenities and robustness and durability of materials should be prioritized over low cost.
- Maintenance procedures for existing playgrounds should be revisited because currently the quality of playgrounds is not maintained at a high standard everywhere. The cause of newly build playgrounds falling into disrepair should be identified and addressed.
- Lack of accurate data about the location of playgrounds has limited the ability to identified communicates that are underserved with these assets. It is recommended that a comprehensive mapping of playgrounds is undertaken, after which the accessibility/coverage analysis exercise can be repeated.

Sports Fields

- The accessibility and quality of sports pitches are reasonably good. However, an opportunity exists to position these assets as means of increasing engagement of citizens in sports and promoting a healthy lifestyle, e.g., by organizing local neighborhood festivals and tournaments.
- Maintenance of assets should remain an important priority in order to ensure the longevity and productiveness of assets.

Local Parks

- Several local parks require a comprehensive rehabilitation and redesign so that they can address the needs of local communities. The review has shown that while some local parks are in good shape, in others amenities are crumbling, the parks are not cleaned, and vegetation is overgrown – which makes these places feel unwelcoming, inaccessible and even unsafe thus defeating their main purpose of being a refuge space for the local community. To improve quality of these assets it is necessary to conduct a comprehensive stocktaking of the quality of existing local parks (this study provides only an assessment of a small sample).
- It is important to improve access to local parks in underserved communities. Our analysis has revealed several residential areas, where access to local parks is limited, this can be addressed through development of new park spaces. (see the last section of recommendations).
Destination Parks
- Tbilisi should undertake comprehensive upgrades of most popular parks that should include comprehensive re-branding, re-programming and physical rehabilitation. While Tbilisi has relatively few large parks their potential is clearly underutilized. Parks identities are weak, they are not generating strong engagements. To address this the city needs to follow best global practices in comprehensively upgrading parks. It is critical that such upgrades do not only include physical improvements, but include analysis of park’s audience, functions and services that such audiences need, physical spaces that can accommodate these services, branding and promotion strategy that can bring these audiences to the park, events and programming that can enhance their experience, and management and maintenance arrangements that can ensure the sustainability of park operation.
- We propose that parks that are best suited for comprehensive upgrades and rehabilitation are: Lisi lake, Vake park, Turtle lake, Mushtaidi, Veterans park, Vera park, Dedaena park, Godziashvili park. The attached documents offer priority actions for each of the largest 30 green spaces analyzed, and brief examples of best practices of park re-branding and programming.

Developing new parks
- Tbilisi has potential to improve access to green spaces by developing new local and large parks. The team has analyzed using a combination of geographical modeling and expert validation and has proposed 10 sites for new parks of various size. (See the map of these spaces in the attached package)
We have also identified a number of spaces that are currently used as informal parks, but require proper development. (See attached PowerPoint with assessment of largest parks)
- The top priority for new large parks include:
  - Tbilisi Sea Shore – The area represents great possibility to create a system of interconnected parks next to Tbilisi sea. This can create attractive recreational zone with water reservoir and big park with already popular activities such as bathing, beach, water ski, boats, existing water park, etc. Parts of the proposed park, will benefit residential areas lacking green spaces, connects to Khudadov forest and park. It will be possible to connect residential zones with the sea via park.
  - Digomi Mktvari Embankment - The territory is located along the river. Here the river has few small island which can become part of the park. Land is mostly empty from buildings and its significant portion is under state/municipal ownership. In its southern part, there are already a stadium and an open swimming pool located. The area has a great potential to become a big green park with river, islands, sports facilities and recreational functions.
- Additionally, de-facto new large park developments can take place in spaces that are currently inly informally used as parks:
  - Old Hippodrome - Former hippodrome represents an excellent possibility to build a modern urban park. It naturally has green, it has functioned as a recreational area and currently is very popular for citizens to walk dogs, jog, play sports games or rest. It is centrally and very well located between big districts of Saburtalo and Vake. having a park on this location is desired by many locals and it can serve a big number of citizens by becoming one of the largest parks in Tbilisi.
  - Digomi forest - This area has significant municipal land, which it makes it much easier to create a city park. It can serve the entire population of Dighomi and is closely located to hospital district, which can use a park for recreation very well. This are is becoming more and
more popular for citizens to visit and arrange different events. Having a well-designed and maintained park here can greatly benefit this part of the city.