**Communication Strategy: Urban Biodiversity in Tbilisi**

**STAGE 01 - Assessment**

# **Situation Analysis**

Urban expansion is one of the chief characteristics of the freshly minted [Anthropocene era](https://www.theguardian.com/environment/2016/aug/29/declare-anthropocene-epoch-experts-urge-geological-congress-human-impact-earth) and the urbanization process in Georgia is not an exception. Almost half of the Georgian population lives in its capital city – Tbilisi – and the number is growing every day. In recent years the rapid urban development has started here. As the urban environment is constantly evolving, green spaces are disappearing swiftly and huge amount of concrete, roads and cars take over. With the increase of non-natural materials and carbon emissions, it can be difficult for local plants and animals to thrive. Nature can seem a lesser priority here, trumped by other issues, so that the habitat degradation and the loss of biodiversity is a sad reality of Tbilisi. At the same time, Tbilisi is still rich in terms of biodiversity, e.g. more than 100 bird species, snakes, lizards and even bears and jackals live within the wider city limits.

Even urban citizens rely on natural habitats, as we are part of the cycle of life on earth and as such we depend on the overall function of natural systems for our own survival. Properly functioning natural systems purify the air we breathe, the water we drink, the food we eat, and the construction and production materials we require for living. Each species plays an important role in its ecosystem. By losing habitats and biodiversity humans lose access to essential ecosystem services.

It is widely acknowledged that cities with functioning ecosystems make for better places for humans to live. Urban green spaces help combat air and noise pollution, soak up rainwater that may otherwise creates flooding, create a habitat for local wildlife, eases traffic, and improves the psychological well-being of city residents. Acknowledging the ecological and social value of nature in Tbilisi and the protection and appreciation of existing green spaces is essential for supporting the biodiversity in Tbilisi. Achieving this is challenging and will require the collaboration between the Tbilisi City Hall, decision makers, urban planners, NGOs and urban communities as a whole.

**Problem identification**

Although nature conservation has traditionally focused on the countryside, issues of biodiversity protection also appear on the political agendas of many cities. There are many causes of biodiversity and habitat loss, but urbanization has been shown to be one of the most damaging in terms of numbers of species lost or threatened. Habitat loss is identified as a main threat to 85 percent of all species described on the [IUCN’s Red List](http://www.iucnredlist.org/). And the main cause for habitat loss is land use change due to urbanization and transport infrastructure.

As the city of Tbilisi grows, vital habitat is destroyed or fragmented into patches not big enough to support complex ecological systems. Species may become endangered or even locally extinct as

If a lack of understanding or concern about importance of these issues persists among the public and the private sector as well as civil urban society, it is unlikely that current trends will change course. Therefore, this communication strategy will focus on raising awareness on the link between urban development and biodiversity in Tbilisi, and more specifically on habitat degradation, biodiversity loss and the need for green spaces.

The strategy will focus on raising knowledge and contributing to environmentally friendly attitude changes regarding the value of urban biodiversity and the dangers of habitat degradation for humans and wildlife.

**Key factors and root causes**

Urbanization impacts biodiversity directly and indirectly. Direct impacts primarily consist of habitat loss and degradation, altered disturbance regimes, modified soils and other physical transformations caused by the expansion of urban areas. Indirect impacts include changes in water and nutrient availability, increases in abiotic stressors such as air pollution, increases in competition from non-native species, and changes in herbivory and predation rates.

The rapid development of the city causes biodiversity to decline by fragmenting or destroying large natural habitat areas through the construction of roads, houses and industry on which many species depend. In many cases, only small patches of the original habitat remain contained within the city limits. Small habitat patches are unable to support the same level of genetic diversity as they formerly could and some sensitive species become locally extinct. Previously natural areas are swallowed up by the urban need for housing, commercial and administrative buildings, streets and parking lots.

Along with this, the rising human population is driving the expansion of urban areas, covered or compacted soils and increasing the demand for natural resources such as timber and fossil fuels. Natural water retention areas such as wetlands are transformed into urban spaces.

And last but not least, community’s lack of awareness about these issues makes nature conservation not a priority on the political agenda of city life and is not considered as an important part of urban development. Hence - when there’s no will, there is no way.

**Impacts**

Pollution can cause indirect damage by making an environment too toxic for all or certain species. This inevitably leads to habitat destruction which has been called the largest factor contributing to the current global extinction event.

There is another factor working to reduce biodiversity in Tbilisi. Biotic homogenization refers to the replacement of regional native species with non-native, invasive and cosmopolitan species, which leads to a decrease in regional and global biodiversity.

In 2015, a flash flood in Tbilisi caused 20 human casualties and left half the zoo animal population dead or on the loose. This reminded urban dwellers of the risks when urban development is not in balance with nature.

**Alternative practices**

In urban areas, where the human population has changed the landscape dramatically, green initiatives need to be put in place to help the local biodiversity to survive, such as recreational activities, eco-tourism and nature-based education, which potentially contributes to increased environmental awareness among residents. It is important to take care and protect existing green spaces and it would benefit the quality of life in the city if new ones were developed. An increased willingness to use public transport would result in less urban space for streets and parking lots. Garden owners could pro-actively take small steps to attract and provide a conducive environment for endangered species such as bees, other insects, or birds. The municipal government may engage in a master plan that takes nature and ecological concerns into consideration. Moreover, stronger legislation and law enforcement in city development planning would also lead to a preservation of biodiversity in the city. All these alternatives would enhance the thriving of Tbilisi’s biodiversity.

# **Audience and KAP analyses**

**Target groups**

This communication strategy focuses on three target groups in Tbilisi: (1) the young population, (2) decision makers and (3) active journalists & community leaders.

**Target group analysis**

The selected target groups already know that uncontrolled urbanization in general causes a lot of issues and affects their life in a bad way. But urban biodiversity is still not a popular topic among them. They have only limited knowledge about the fact that Tbilisi is still very rich in biodiversity and the target group’s attitude is rather pessimistic towards the urban development and the coexistence of nature. As of yet, the target groups lack the understanding of their own role and responsibility in solving or maintaining the situation.

There’s another challenge – even those of them from our selected target groups, who care for nature and environment in general, are often unfamiliar with the meaning and significance of biodiversity loss. In addition, there is a tendency to place greater value on the more familiar and charismatic in nature rather than recognizing the integral roles and importance of all species, even insects, worms, fungi, and microbes, in various ecosystems. So, this lack of appreciation for the richness and interconnectedness of diverse species, yields a distorted picture of what is really at risk.

On the other hand target groups recognize urban greens as a public good and as one of the determinant of the quality of city life, because benefits they are getting or can get from parks, for example, are more obvious and relevant for their everyday life, like physical activity, rest and relaxation, socialization and etc. and as urban greens are the key source for urban biodiversity, we might want to use this information wisely to approach target groups about Campaign’s topic through their own needs and through the things they are already familiar with.

**KAP Survey**

In 2016, a Knowledge, Attitude and Practice (KAP) survey has been conducted in Georgia. The results of this study indicate a low to average level of knowledge and activities in regard to the conservation of biodiversity and ecosystem services within the general public

Almost half of the respondents heard of the term "biodiversity" but only 28% of them understand the meaning. Georgians are concerned about the state of the country's biodiversity and many strongly believe that the loss of flora and fauna is a serious problem. Deforestation (95%), air and water pollution (95%), man-made disasters (92%) and climate change (92%) are regarded the most serious threats to biodiversity.

Respondents are concerned about the loss of biodiversity, but much of the public does not engage in activities intended to counteract it. Only a very small part of Georgians report that they participate in volunteer projects related to biodiversity. Despite this low level of reported action, a significant number of respondents state their willingness to do more to protect biodiversity and to learn more about this topic and climate change.

The 2016 KAP study did not focus particularly on the awareness of the uncontrolled urbanization in Tbilisi, and more specifically on habitat degradation and biodiversity loss. Nonetheless, it gives a broad overview of Georgian public’s knowledge, attitudes and practices in regard to biodiversity and ecosystem services. An aggregated analysis of indexes, correlations and cross-tabulations of variables related to knowledge, attitudes and practices that will allow Before-After comparison of different social groups will contribute additional results.

# **Communication objectives**

The communication objectives for this communication strategy mainly focus on knowledge increases and environmentally friendly attitude changes of selected target groups about the value of biodiversity in Tbilisi. The objectives are at the moment more general and will later, after the involvement of more strategic partners and further conceptualization, be more precise in order to increase the impact of this communication strategy:

K Target groups know more about the richness of biodiversity in Tbilisi.

K Target groups know more about the ecosystem services urban biodiversity provides, particularly concerning the quality of life and health, tourism, and socio-cultural potentials.

K Target groups know more about the overall threats that urbanization in disharmony with nature is causing.

K Local authorities know more about the value and importance of having rich biodiversity in the city.

A The media sector is more interested in the issue of urban development and biodiversity, so that more articles and stories are published about this theme.

A Target groups are more positive about the future of nature’s coexistence in urban areas.

A/P Target groups are more willing to engage in and contribute to initiatives regarding green spaces and the related biodiversity values and ecosystem services.

P Public discussions are more frequent about urban development and biodiversity.

# **STAGE 02 - Planning**

# **Communication strategy development**

The conceptualization and implementation of this communication strategy will be coordinated by a management unit of 2 staff. Matthias Kühn (GIZ Advisor) and Ketevan Oragvelidze (GIZ Project Assistant) of the GIZ IBiS team will jointly administer the process together with the respective partners.

The timeline for the whole communication strategy will preliminarily be from May 2018 until the end of 2019. The kick-off event of the implementation process of this campaign was the Biodiversity Day on 22.05.2018. A non-fixed budget for the implementation of this strategy until November 2019 will be available from the GIZ.

# **Participation of strategic groups**

The main partner for this communication strategy is the Tbilisi City Hall. Therefore, it is also expected that the Tbilisi Zoo and the Botanical Garden of Tbilisi will be involved in the implementation process of this communication strategy. Moreover, the management unit aims at involving other partners such as active NGOs in Tbilisi. A kick-off meeting took already place on 23 March 2018 in order to create synergies among important NGOs in Tbilisi. Participants were representatives from [National Geographic Georgia](http://www.nationalgeographic.ge/), [SABUKO](https://sabuko.ge/) and [EcoVision](http://ecovision.ge/eng). All the mentioned, and additional, organizations joined a workshop on public awareness raising at the Tbilisi Botanical Institute in April 2018. This workshop functioned as a nucleus for the communication strategy in question and, possibly, its management unit. In addition, the NGO [SEED](https://www.facebook.com/seedgeorgia/) and the film production company [Eco Films](http://ecofilms.ge/) have joined this communication strategy during the summer and autumn of 2018. Other partners are still welcomed to join the communication strategy at a later stage.

# **Media selection and mix**

The communication strategy mainly focuses on knowledge increases and environmentally friendly attitude changes of selected target groups about value of biodiversity in Tbilisi. The knowledge of our target groups about the value of urban biodiversity is estimated as low to medium. That’s why the main approach will be informative and motivational in order to create awareness focusing on the ‘What’ and ‘Why’ questions. The communication channels will be mainly mass media and to some extent group media. The following media mix is currently planned as part of the communication strategy. Additional media, educational materials and communication channels may be selected in the process ongoing conceptualization of this communication strategy.

1. **Nature Walks (Tbilisi City Hall)**

Several Nature Walks regarding the discovery of urban biodiversity took place around International Day of Biological Diversity on 22 May 2018 in cooperation with the Tbilisi City Hall. These Nature Walks may be repeated during autumn 2018 and 2019. The idea was to organize different ‘biodiversity groups’ throughout Tbilisi, each focused on different components of biodiversity: plants, birds, amphibians & reptiles, insects and general biodiversity. Each group was guided by an expert in the particular field. Tbilisi’s citizens were invited to join these groups based on their interest. For each group a gathering station and time was announced in advance together with the invitation. The groups of citizens and experts had short walking tours on sites defined in advance and explored the urban biodiversity they came across. The leading experts provided educational & scientific information about the species found during the walks. 13 walks were conducted during several weekends in May & June (s. Table 1).

Table 1: Nature Walks in 2018 by topic, location, time and guiding expert

|  |  |  |  |
| --- | --- | --- | --- |
| **Biodiversity Area/Component** | **Walk site** | **Date/Time** | **Expert** |
| **General Biodiversity** | Krtsanisi forest | 27.05.2018 | Giorgi Berichikidze |
| Vake Park | 03.06.2018 | Giorgi Berichikidze |
| **Plants** | Old Hippodrome | 26.05.2018 | Iakob Kapanadze |
| Lisi Lake | 03.06.2018 | Iakob Kapanadze |
| Tbilisi (new zoo) | 03.06.2018 | Nino Eradze |
| **Insects** | Krtsanisi Forest | 26.05.2018 | Giorgi Mamadashvili |
| Botanical Garden | 09.06.2018 | Giorgi Mamadashvili |
| **Birds** | Vake Park | 02.06.2018 | Zurabi Gurgenidze |
| Lisi lake  | 02.06.2018 | Christian Goenner |
| Lisi lake  | 03.06.2018 | Christian Goenner |
| Krtsanisi Forest | 09.06.2018 | Zurabi Gurgenidze |
| **Amphibians & Reptiles** | Lisi Lake | 27.05.2018 | Giorgi Iankoshvili |
| Botanical Garden | 10.06.2018 | Giorgi Iankoshvili |

The Nature Walks were announced online by the Tbilisi City Hall’s Environment Protection Service’s Facebook page. A Facebook event has been created called ‘Biodiverse Tbilisi’ where the City Hall provided information about the ‘Urban Development and Biodiversity Campaign’ and invited the city’s citizens to the walks. 13 different walks took place with around 80 participants. Tbilisi’s City Hall also reported about the results of the walks on the Facebook page of the Environmental Protection Service together along with the collected pictures and the list of discovered species, which were provided by the leading experts. A story teller and a photographer from National Geographic Georgia were also present on some of the walks and a blog will be published soon about the ‘Biodiverse Tbilisi’ project on their website.

1. **Creation of a Tbilisi Biodiversity Map (National Botanical Garden of Georgia)**

The National Botanical Garden of Georgia (NBGG) are a partner in creating a biodiversity map of Tbilisi using the application ‘iNaturalist’ ([https://www.inaturalist.org](https://www.inaturalist.org/)). This application is a good way to observe and register plants, birds, animals, amphibians and reptiles. iNaturalist is a place where one can record what you see in nature, meet other nature lovers and learn about the natural world. The application is quite popular worldwide. At this time, over 1,200,000 people are signed up, who observed almost 8,000 000 times 146,000 species. The idea of the application is to take a picture or a sound recording of an observation object, attach coordinates and make a classification (classification is optional since one can be identifier of observations of other people). After each observation a green dot on a world map appears, which one can see on the webpage [www.inaturalist.org](https://www.inaturalist.org/observations?project_id=23635). The webpage of iNaturalist provides the opportunity to create a project by creating an area of observation, in this case the Tbilisi urban area. The cooperation with the NBGG started officially on 07 July with a kick-off event at the National Botanical Garden of Georgia in Tbilisi and will last until December 2018.

1. **Photo Contests, Exhibitions & Blogs (National Geographic)**

The NGO National Geographic Georgia complemented the International Day of Biological Diversity on 22 May 2018 with a photo competition called ‘Your Shot’. The aim was to involve young photographers in taking pictures of urban areas that represent the value of biodiversity in Tbilisi. More information about the ‘Your Shot’ community can be found on <http://yourshot.nationalgeographic.com/>. The particular ‘Your Shot’ photo contest was the first National Geographic ‘Your Shot’ photo contest in Georgia and all participating photos can be found here: <https://bit.ly/2INvvfa>. The winners of the photo contest have been announced during an award ceremony with around 50 participants at the National Museum of Georgia on 22 May: 1st Place: <https://bit.ly/2LbocMK> (chosen by National Geographic New York), 2nd Place: <https://bit.ly/2KJhMDu> (chosen by National Geographic Tbilisi) & 3rd Place: <https://bit.ly/2KAIuhl> (chosen by the people through the ‘Your Shot’ website). The best pictures are part of the [Caucasus Biodiversity](http://museum.ge/index.php?lang_id=ENG&sec_id=69&info_id=14936) exhibition at the National Museum of Georgia which celebrates 150 years after the first exhibition of natural history in Tbilisi. It is expected that a second ‘Your Shot’ photo contest on the value of urban biodiversity will be conducted during the winter of 2018/19.

1. **Media Trainings (Ecovision)**

A cooperation with the NGO Ecovision has been started this summer in mid-July with a project duration of 5 months. The public will be informed about the project & its terms and conditions via different communication channels (online announcement, social networks, presentations and discussions for target groups) and different kind of printed promotional materials. The cooperation focuses on several activities to raise the public awareness about the biodiversity of Tbilisi and about its importance (e.g. trainings for students and journalists). As a result of the implementation of this cooperation, it is envisaged that Tbilisi residents will discover and understand that wild nature is still around them and that they will have the information about the main benefits of urban biodiversity.

1. **Urban Birding (SABUKO)**

A cooperation with the NGO Sabuko is now in the late stages of its preparation. The main goal of this cooperation is to raise the awareness about the rich urban birdlife within the city boundaries of Tbilisi. The main goals of the project are to raise awareness of the citizens about the urban bird population and to increase their valuation of local biodiversity, through their engagement in different educational and awareness programs. The project objectives are twofold:

1. People living in Tbilisi have the opportunity to experience nature first-hand, learn about and value local biodiversity, and undertake wildlife monitoring through education and awareness programs.
2. People living in Tbilisi are aware of the diversity of bird species of their city and know how they can make positive changes to their environment.
3. **Community of Concerned Citizens (SEED)**

A cooperation with the NGO SEED is now in preparation. The goal of SEED’s contribution to the overall campaign will be to increase the knowledge and contribute to environmentally friendly attitude changes regarding the value of urban biodiversity and the dangers of habitat degradation for humans and wildlife. The objective of the project will be to create an effective Community (network) of Concerned Citizens (CCC), to improve skills and capacities of community leaders and youth for increasing public awareness of the population of Tbilisi and stimulating their active engagement in urban biodiversity protection through educational campaigns using web and social media platforms.

1. **Art Nature Documentary (Eco Films)**

The movie production company Eco Films was chosen to offer its video production services for an art nature documentary. The objective of the movie production is to showcase Tbilisi’s rich biodiversity through an art movie that awakens the audiences’ interest. Since it is important that the documentary reaches the emotions of the audiences through an artistic depiction, it is part of the project that the film music will be produced according to the footage taken. The movie will be coherent with scientific facts and present the reality of Tbilisi’s urban nature in 2018/19. All video footage will be taken during winter 2018/19, spring 2019 and summer 2019. The main outcome will be a 7-10 minutes short art nature documentary and a 25-35 minutes extended art nature documentary. The documentary will include footage of human-wildlife interactions & conflicts in Tbilisi. The documentary will be suitable for public screening and posting on social media. The production company will also conduct several promotion events after the finalization of the art nature documentary in fall 2019 in order to 'heat up' the talk of the town in Tbilisi.

1. **Pilot areas & others (Tbilisi City Hall)**

In the scope of this communication strategy, the forestry component of the IBiS project in Georgia concentrates on the development of a forest pilot area in Tbilisi in cooperation with the Tbilisi City Hall. The biodiversity component of the IBiS project will also join forces with the Tbilisi City Hall in order to create several educational trails in Tbilisi. The aim will be, i.e., to highlight the ecosystem services that such habitats provide for the urban population and beyond.

Further, the Tbilisi Zoo plans their opening of the new enclosure during the second half of 2018. Most preferably the event should take place during an important implementation stage of this communication strategy. The aim is to invite the decision makers of Tbilisi (e.g. the mayor of Tbilisi) and to raise their awareness about the value of (urban) biodiversity. The event’s aim is to highlight that the Tbilisi Zoo is an integral part of raising awareness about the value of biodiversity among the urban population. Although, the Tbilisi City Zoo does not focus on urban biodiversity, this event is an important opportunity to reach the decision makers in Tbilisi. The Tbilisi Zoo is widely known among the population and has therefore and important role in promoting biodiversity in the wild and in the urban area itself.

# **STAGE 03 - Production**

# **Message design**

The effectiveness of the communication strategy largely depends on the ability of its message to catch the attention of and to be understood by the target audience. The campaign message also should fit to the media selected. This is why they should not be formulated early on the campaign strategy development. Otherwise one project’s message might contradict another one’s. It also needs to be considered that we are now in the information overload era, especially the urban society, so the messages need to be strategically positioned, so they stand out from the others. They might otherwise not be noticed even though they are relevant to the target groups.

First of all, the positioning of messages in 2018 and until mid 2019 should first be informational and motivational, while action-orientation will start getting more important in the later course of 2019. Hence, message design should raise attention, curiosity and interest in the urban development and biodiversity related themes. Here, a question mark ("Did you know that more than 100 bird species live in Tbilisi?") can be more effective than an exclamation mark. But questions should lead to answers, facts, possibly unexpected ones. This may trigger the desire to dig deeper and do something about the issue, possibly engaging in the protection of urban biodiversity. Therefore, the values, benefits and incentives of urban biodiversity and ecosystem services should be centre stage. Love (for nature), not loss (of species) can be attractive and persuasive psychological appeals.

Messages should exemplify why people should engage in biodiversity conservation, what nature is good for in a city. Most of the rewards, benefits and incentives that are so essential for the success of this campaign will be related to the quality of life and health of urban residents. Once the informational and motivational WHY (urban biodiversity) questions and answers have taken roots, action-oriented HOW suggestions can follow ("What you can do to protect urban biodiversity).

As the KAP study shows, the use of the word biodiversity itself in campaign messages would not be a good idea, because its meaning is not widely known. Surely biodiversity does not have the immediate recognition of phrases denoting other environmental aspirations, for example, “pure water” or “clean air.”

What exactly the messages should be in the end, and how these should be formulated, is a task to be left to the management unit and local social marketing specialists. Message design will become more accurate along with the strategy's or campaign’s development.

# **Producing media and preparing dialogues**

For the continuity and flow of the implementation of this communication strategy, it is important to safeguard regular programming, i.e. a steady delivery of themes and related messages through a variety of media and materials reaching out to selected target audiences. At this stage, it is not yet clear how the collaboration and shared responsibility of the organizations joining the management unit, and the related production of media and materials can be facilitated and financed.

The Terms of Reference of all contracts with service providers and/or partner in the context of this communication strategy or campaign should incorporate this Concept as an Annex. This will safeguard and stress that all media productions, non-formal educational materials, events and/or other communication channels should be integrated in the strategy and contribute to the latter's themes, objectives, and messages in relation with selected target groups.

# **STAGE 04 – Action & Reflection**

# **Media performances & field implementation**

Existing and appropriate events, occasions, times and places should be considered for using and disseminating the media and materials produced. If necessary, events or platforms should be created that stage media inputs (e.g. a festival, special day, VIP visit, award ceremony related to a competition, launching event etc).

The management unit of this campaign strategy should make sure of the ‘up-stream compatibility’ of the media used (e.g. people's theatre performance - video film - TV program), and cross-fertilize the advantages of different media and communication channels (e.g. the emotional appeal of radio with the factual one of print media). Whenever possible, existing communication channels, extension services or other institutional outlets should be used for free (e.g. a newsletter or environmental centre or a TV channel of a partner organization).

#  **Process documentation and monitoring and evaluation (M&E)**

To a limited extent, the 2016 KAP Survey can be used as a baseline data by creating indexes, correlations and cross calculation that will allow Before-After comparison of different social groups (see Part on Audiences & KAP Analyses). Another KAP Survey is planned for 2019 and will provide more information on knowledge increases, attitude and practice changes regarding the appreciation of urban biodiversity. Formative (i.e. regular/ongoing) and/or ex-post analysis of the attitude change through a post-KAP survey will be sufficient for the IBiS project's results-based monitoring. This type of monitoring can be achieved by means of simple one-page questionnaires and/or focus group discussions during or after events, media or educational interventions.