

EcoVision also conducted a 2-day media training on urban biodiversity for print, broadcasting and online media journalists. Participants were invited to media contests so that the resulting media products and the award-winning ceremony became part of the Urban Biodiversity Campaign. A drawing contest for school children was conducted about the most unknown and interesting or amazing species in Tbilisi. An exhibition of best paintings was promoted via various media. Informational and fun quizzes including sounds and visuals of urban biodiversity in Tbilisi were offered for Facebook users, who were able to share results with their friends. In addition, EcoVision created a special discussion platform for young people and representatives of local and national governments about urban biodiversity in Tbilisi. Eco Films produced a short trailer (2-3 min) and a film documentary (25-35 min) on the urban biodiversity of Tbilisi showing footage of human-wildlife interactions and conflicts. The trailer and the documentary are suitable for public screening and posting on social media.

The NGO SEED offered citizen journalist trainings by top-class photographers for 'citizen journalists'. The most advanced participants were offered membership in the informal Community of Concerned Citizens (CCC) network set up by SEED that aims at improving the state of urban biodiversity. As a follow-up, a concerned citizens training was offered for participants with advanced skills who will learn to communicate the essence of urban biodiversity problems through visual and textual media on social networks and web-based platforms in a way that catches public attention. Future advanced young professional trainings designed for students of environmental studies will enhance knowledge and skills in science communication. In addition, at least nine educational video products about science and urban biodiversity were created and promoted through the web and social media.



Work from the "YourShot" photo contest participant



Work from the "YourShot" photo contest participant

The Tbilisi City Hall initiated a 12,000 ha urban forest area as a pilot within the wider Tbilisi city limits where interactive forest trails and information boards are intended to be installed in 2020. Around 12-15 Nature Walks regarding the discovery of urban biodiversity have taken place around the International Day of Biological Diversity each year in May 2017, 2018 and 2019 in cooperation with Tbilisi City Hall and Ilia State University. The expert-led walks focused on plants, birds, amphibians and reptiles, insects and general biodiversity. A related Facebook event called Biodiverse Tbilisi invited the city's citizens to the walks in 2018. A story teller and a photographer from National Geographic Georgia participated during the walks in 2019 and published a blog about the walks.

National Geographic Georgia complemented the International Day of Biological Diversity 2018 and 2019 with a Your Shot photo competition for young photographers. The best pictures became part of the permanent Caucasus Biodiversity exhibition at the National Museum of Georgia in Tbilisi.

www.giz.de
www.biodivers-southcaucasus.org



AGENDA

17 May
Kick-Off Event – 16:00 -18:00
at the National Botanical Garden of Georgia

19 May
Urban Biodiversity Event for Kids –
12:00 – 15:00 at the Tbilisi Zoo
(by the Tbilisi Zoo Educational Center)

20 May
Opening Session of the 1st International Scientific
Conference – 10:00 – 10:30
at Expo Georgia
(by the National Botanical Garden of Georgia)

21 May
Urban Biodiversity Day at the
1st International Scientific Conference – 09:00 – 16:00
at Expo Georgia (by the National Botanical Garden
of Georgia)

22 May (International Day of Biological Diversity)
Bird Festival – 10:00 – 18:00
at the National Botanical Garden of Georgia
(by SABUKO)
YourShot Photo Competition Award Ceremony –
19:00 – 21:00
At The Tbilisi Open Air Museum of Ethnography
(by National Geographic – Georgia)

23 May
Green History of Georgian-German Dialogue Book
Presentation & Exhibition – 18:00 – 20:00
At the National Museum

28-30 May
School Conference on Urban Biodiversity – 09:00 – 18:00
at the Tbilisi Zoo (by the Tbilisi Zoo Educational Center)



20-27 May
Guided Nature Walks (by Ilia State University)

Invertebrates
20.05.2019 9:00 From Vake park to Turtle lake and surroundings

Invertebrates & Birds
20.05.2019 9:00 Vake Park and surroundings

Invertebrates & Birds
20.05.2019 9:00 Lisi Lake

Invertebrates
25.05.2019 9:00 From Turtle lake to mtatsminda park

Invertebrates
25.05.2019 9:00 Krtsanski park

Invertebrates
25.05.2019 9:00 Chili lake

Amphibians and reptiles
21.05.2019 9:00 Krtsanski park

Amphibians and reptiles
21.05.2019 9:00 Lisi Lake

Amphibians and reptiles
25.05.2019 9:00 Tbilisi Water Reservoir (Tbilisi "Sea")

Amphibians and reptiles
25.05.2019 9:00 Chili lake

Trees and Shrubs
22.05.2019 9:00 From Vake park to Turtle lake and surroundings

Trees and Shrubs
22.05.2019 9:00 From Turtle lake to mtatsminda park

Birds
27.05.2019 9:00 Krtsanski park

Birds
27.05.2019 9:00 Lisi Lake

Contact for nature walks: georgianwalks.tbilisi@gmail.com / 598 22 97 99



Days of Nature in Tbilisi in spring 2019

Since the Urban Biodiversity Campaign network has grown wider and became more effective during the implementation phase of the campaign, the partner network created the so-called Days of Nature in Tbilisi in 2019. Many events and activities were scheduled on 17-30 May as a well-coordinated effort by the urban biodiversity partner network to address citizens of Georgia's capital. The official Kick-off Event in 2019 took place on the premises of the National Botanical Garden of Georgia. The whole partner network, high-level officials, and the public attended the event.

Tbilisi Zoo joined the partner's network in May 2019. The main goal of their contribution was to raise school children's awareness of the importance of safekeeping urban biodiversity. This Urban Biodiversity Event for Kids was exclusively organized for kids and took place at Tbilisi Zoo.

The 1st International Scientific Conference was hosted by the National Botanical Garden of Georgia around the International Day for Biological Diversity on 22 May 2019. The objective was to analyze the results of research and conservation of Georgia's biodiversity in general, including a session on urban biodiversity. The conference aimed at generating visions and ideas for the national strategy on plant conservation in Georgia.

SABUKO held a Bird Festival on 22 May 2019 to celebrate the International Day for Biological Diversity and the 10th anniversary of the Hour of Garden Birds project in Georgia. It included guided bird walks, a bird ringing camp and a bird rally in the National Botanical Garden of Georgia, in which more than 200 children participated.

The presentation of the project The Green History of Georgian-German Dialogue: Ideas and Individuals was held at the Georgian National Museum's Caucasian Biodiversity Hall. The project was implemented by the NGO Women's Initiative for Equality. The presentation featured a book on the project, as well as an exhibition and information boards about Georgia's nature and Georgian, German and other European researchers. Around 50 guests, including high Georgian government officials and the German Ambassador attended the event.

A School Conference on Urban Biodiversity for school children in grade 5-12 was held on 29-30 May 2019. Around 300 school students were registered out of which 120, 10-17 years old, actually participated in the conference. The children were not only from Tbilisi, but also from Telavi, Rustavi, Bodbe, Marneuli and Tsalka. After a competent jury checked the articles submitted by the children, the best 60 works were selected, and nine students were awarded books, tents, sleeping bags and back packs.

Urban Biodiversity Media Festival in late 2019

A Final Urban Biodiversity Media Festival was planned for November 2019 for concluding the campaign. The event was planned as a coordinated effort of the entire urban biodiversity partner network in order to reach as many Tbilisi citizens as possible. All target groups of the communication strategy were addressed and invited to this final media event. The event highlighted the premiere of the art nature documentary by Eco Films and many other presentations of the urban biodiversity partner network, who used this public platform to showcase their work in the context of the urban biodiversity campaign.

The festival is not supposed to be the end of the urban biodiversity working group - it may well be the beginning of a sustained and independent partner network and community of practice that goes beyond a campaign limited in time.

Integrated Biodiversity Management, South Caucasus (IBiS)

Bio Topic

Communicating Biodiversity

Authors: Manfred Oepen, Ketevan Orgavelidze, Matthias Kühn, Albina Muzafarova & Christian Gönner

Background

The IBiS program was engaged in improving environmental awareness in order to reach one of the project's major outputs: *"The perception of the general public towards the importance of integrated management of biodiversity and ecosystem services is more positive"*.

In 2016, a Knowledge, Attitude and Practice (KAP) Study was conducted in Georgia that indicated a low to average level of knowledge and activities regarding the conservation of biodiversity and ecosystem services within the general public. For example, almost 90% of the rural population stated that they benefited from forest resources. However, less than half of them were willing to protect forests. The same was observed in relation to biodiversity. Many people believed that the loss of flora and fauna is a serious problem caused by deforestation, air and water pollution or other human-induced disasters. Yet only a few of them engaged in biodiversity conservation activities.

The responsible ministries and other relevant partners tried to overcome the stated passivity through public awareness activities. As part of the National Biodiversity Strategy and Action Plan in Georgia, for instance, public newsletters and websites, journalist trainings, policy briefs for decision makers, music and theatre events, and a radio show were initiated.

In 2018, IBiS reinforced these efforts by employing a more systematic 10-step environmental communication strategy to promote environmental awareness in Georgia. Two related training workshops in January and April 2018 brought government and non-government, media and academic organizations together. As one of the results, participants began shaping a campaign on urban biodiversity in Tbilisi.

Urban Biodiversity Campaign 2018-2019

Urban expansion is a major trend in Tbilisi, Georgia's capital and home for about half of the country's population. Rapid urban development resulted in the disappearance of green spaces and difficulties for local plants and animals to thrive. Nevertheless, Tbilisi remains rich in terms of biodiversity as more than 100 bird species, many species of snakes, lizards and even bears and jackals live within its wider limits.

Urban citizens, as anybody else, depend on products and services a healthy environment provides. Properly functioning natural systems purify the air they breathe, the water they drink and the food they eat, and nature provides the construction and production materials they require for living. Urban green spaces help combat air and noise pollution, soak up rainwater that may otherwise create flooding, create a habitat for local wildlife and improve the psychological well-being of city residents. For example, in 2015, a flash flood in Tbilisi caused at least 20 human casualties and left half of the zoo animal population dead or on the loose. This event reminded urban dwellers of the risks when urban development is out of balance balance with nature.

Each species plays an important role in its ecosystem. By losing habitats and biodiversity, humans lose access to essential ecosystem services they need to survive. Therefore, the Urban Biodiversity Campaign focused 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 campaign started in May 2018 and found its end in November 2019.

Communication Strategy in a Nutshell

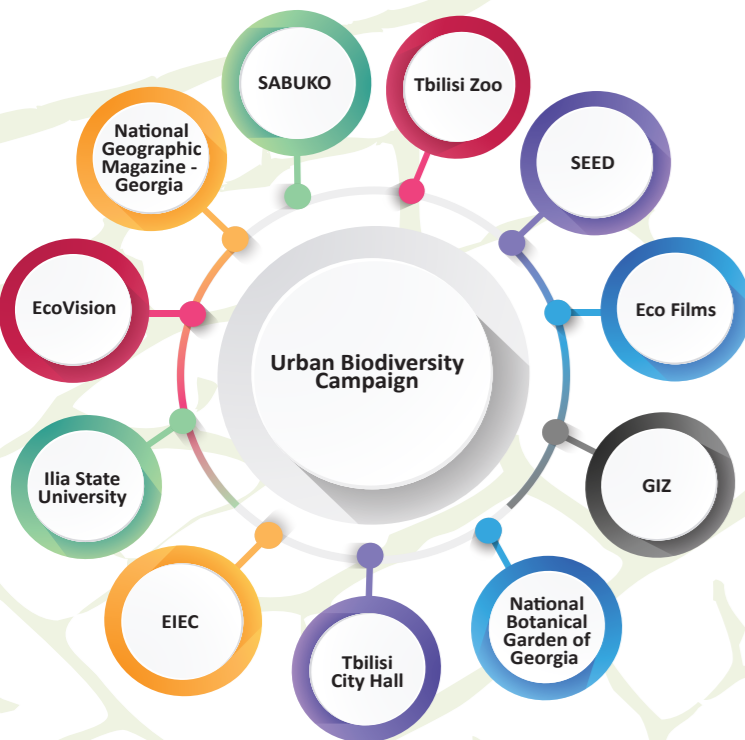
- Stage 1 Assessment**
- o1 Situation analysis and problem identification
 - o2 Audience and Knowledge-Attitude-Practice (KAP) analyses
 - o3 Communication objectives

- Stage 2 Planning**
- o4 Communication strategy design
 - o5 Partner involvement
 - o6 Media selection and mix

- Stage 3 Production**
- o7 Message design
 - o8 Media production and pre-testing

- Stage 4 Action & Reflection**
- o9 Media performances & field implementation
 - 10 Process documentation and M&E





Stakeholders of the Urban Biodiversity Campaign network

Early assessments and assumptions

An Urban Biodiversity Campaign working group was created, comprising the Tbilisi City Hall, the National Botanical Garden of Georgia, the National Geographic Georgia, EcoVision, the Society for Nature Conservation (SABUKO), the NGO Science, Environment, Environment, Education and Development (SEED), the Environmental Information and Education Centre (EIEC) of the Ministry of Environmental Protection and Agriculture, Eco Films and GIZ. The working group started their situation analysis from an understanding that public participation and contributions are essential for achieving changes in attitudes and practices related to such a broad issue (see **Step 1** in the Communication Strategy in a Nutshell overview). The group assumed that green initiatives, such as recreational activities, eco-tourism and nature-based education, may attract attention and increase interest about urban biodiversity, which may lead to a general desire in citizens to protect nature. Such a, though still diffuse,

desire may then trigger calls for action, i.e. doing something specific (see KISS AIDA illustration next page). For example, an increased willingness to use public transport could 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 urban development plans that takes nature and the ecology into consideration. Moreover, stronger legislation and law enforcement in urban development planning could also lead to a preservation of biodiversity in the city.

The Urban Biodiversity Campaign focused on four major target groups in Tbilisi - the young population, decision makers, journalists and community leaders (**Step 2**). The Urban Biodiversity Campaign team then formulated modest communication objectives related to knowledge gains and environmentally-friendly attitude changes concerning the value of biodiversity in Tbilisi, rather than practice changes (**Step 3**). For example, by the end of the campaign, target groups are expected to have gained more knowledge about the richness of biodiversity in Tbilisi and the ecosystem services it provides, in terms of quality of life and health, tourism, and socio-cultural potentials. The media published more on the issue of urban development and biodiversity. Especially the youth was anticipated to more willingly engage in and contribute to initiatives regarding green spaces, the related biodiversity values, and ecosystem services.



SABUKO's performance during the "Days of Nature" opening event

Planning and producing for action

The KAP conclusions from 2016 called for a 'heating up society' strategy (**Step 4**), based on which a series of short and simple messages were to be delivered through many media and communication channels for at least a year or two. A two-step flow of the communication approach was applied from the mass media to opinion leaders and influencers who then communicated interpersonally with their peer groups. The Urban Biodiversity Campaign used an infotainment approach, suggesting that information combined with entertainment increases emotional identification and makes complex themes easier to understand.

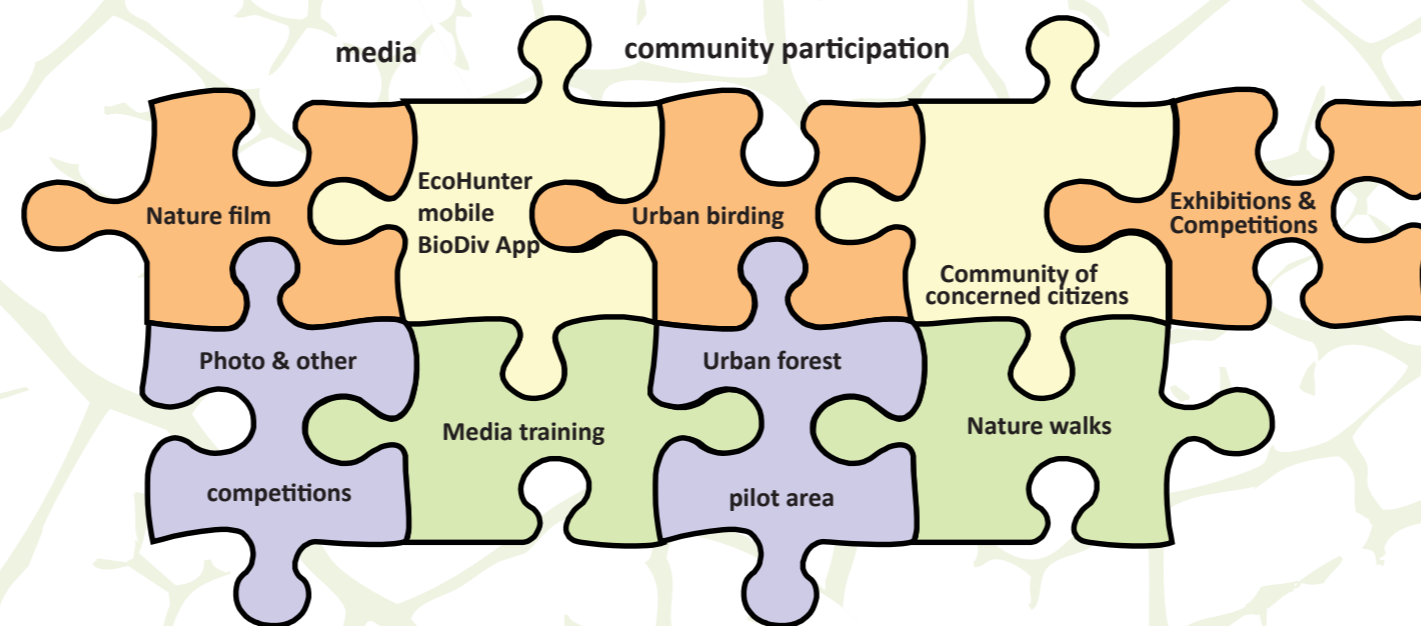
To achieve the campaign's objectives, all planned and budgeted activities were part of a strategy management that was loosely coordinated by GIZ, while each of the partners had their own producers, target groups, intermediaries, and distribution channels. Regular meetings of the Urban Biodiversity Campaign team ensured and coordinated the actual production and delivery of different media, events and activities.

Service providers typically contributed with contents, graphical support or media and pedagogical skills – they wrote, edited or published texts, produced or selected photos, illustrations, videos or radio shows, facilitated learning groups through training or infotainment such as competitions, theatre, community events, etc. Intermediaries, such as government agencies or civil society organizations, supported the producers with information. The distribution channels delivered the media produced to the targeted audiences through websites, newspapers, broadcasting shows, theatre plays, exhibitions, public events, and outdoor activities combining a variety of the media and tools mentioned.

Environmental Communication Strategy

An environmental communication strategy is the planned and strategic use of communication processes and media products to support effective policy making, public participation and project implementation geared towards environmental sustainability.

It is a two-way social interaction process enabling relevant social groups to understand key environmental factors and their interdependencies, and to respond to related problems in a competent way.



Media, events and activities of the Urban Biodiversity Campaign complement each other

Due to the complex nature of environmental awareness, no single organization could accomplish the task on their own. At the same time, no single medium is good for all purposes and target groups. Therefore, the Urban Biodiversity Campaign media mix employed a variety of media, trainings and community participation events complementing each other (**Step 6**). The mass media provided basic knowledge, information dissemination, massive outreach, and regular programming in the sense that something about urban diversity was on the TV, radio and print media news regularly over a period of time. The community-based activities were best suited for instigating motivation and mobilization, action orientation, easy access, local context, and a two-way communication.

KISS

- Keep
- It
- Short
- and Simple

so that the message

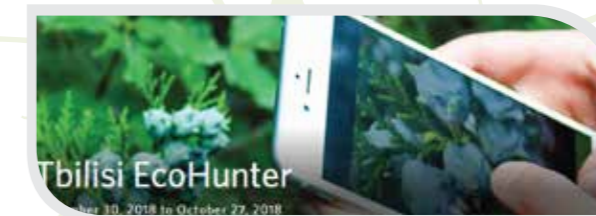
AIDA

- catches the audience's Attention,
- creates Interest
- triggers a Desire, and
- leads to Action

KISS AIDA elements

The Urban Biodiversity Campaign message design combined the Kiss AIDA elements with "Love not Loss" social marketing in biodiversity conservation (**Step 7**). As too many negative extinction-type messages generate apathy instead of action, love of nature as a driver for public practices was emphasized instead.

As outlined above, the Urban Biodiversity Campaign media productions, as well as media use and the implementation of environmental education activities, included a wide range of communication channels and events (**Step 8 + 9**). All Urban Biodiversity Campaign media productions, events and activities were continuously recorded for process documentation as well as monitoring and evaluation (M&E) purposes so that measures can be improved and repeated in due time (**Step 10**). The crucial questions always were 'How do we know we are on the right track?', and 'How can we improve performance and networking?'.



EcoHunter contest participant taking picture of the plant



Hash-tag/ Logo from EcoVision's communication

The Urban Biodiversity Campaign in action

The NGO SABUKO contributed with data on birding hotspots in Tbilisi, which complements the plant map created by the National Botanical Garden of Georgia via the iNaturalist-based EcoHunter project. Similar to the Nature Walks conducted around the International Day of Biological Diversity in May 2017, 2018 and 2019, trained guides offered Urban Bird Walks throughout the year of 2019. A printed Urban Birding Guide for Tbilisi, advertised through social media and blogs, supplemented the Urban Walks. Interactive Stations along an Urban Bird Trail were installed in public spaces. A Wild Challenge as part of the campaign took place during spring 2019 having called for activities, such as building a bird bath or box, making a compost heap, conducting a wildlife survey, or building an insect hotel. A Contest of Slogans and Designs provided opportunities for creative people to connect with nature during spring and summer of 2019.

The National Botanical Garden of Georgia developed the EcoHunter as part of the worldwide iNaturalist citizen science online network. A competition in Tbilisi engaged participants in making app-documented observations, descriptions and verifications of specific species in the city between June and November in 2018 and 2019. The idea of the activity was to record a picture or sound of a species, attach GPS coordinates, and identify the species. The competition winners received social recognition through social and conventional media in turn.

EcoVision produced one of the first creative video clips of visuals and sounds of nature in Tbilisi involving birds, insects, rivers, wind, etc. The video was promoted on social media. One-minute infotainment radio spots of species' voices made Tbilisi residents more aware of nature around them along with tips on biodiversity protection. Other information and promotion materials, such as notepads stickers, t-shirts, reusable bags, flyers, posters, calendars and a comic and a colouring book for children, all carrying urban biodiversity messages, were created and published. An owl as a special mascot was included in the mentioned activities. Four trainings for university students on urban biodiversity of Tbilisi were organized. Participants were informed about ways they can engage in decision making processes related to protecting biodiversity.