



Implemented by:



In cooperation with:



National Environmental Education and Communication Strategy

for the Protected Areas System in Mongolia

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Abbreviations

Executive Summary

The summary below is based on points that stakeholders consulted during the capacity needs assessment in 1-2/2020 and 1-2/2022 could agree on so that MET DPAM may prioritize these points for future EECS measures.

1 Main problems

- **Lack of political will, finance and human resources:** This includes the lack of coordination among PA and local government administrations as well as local community organizations. Many resource persons interviewed wondered why more and more PAs are established on the one hand while they are chronically under-financed and under-staffed. Some also expressed their concern that Mongolia PA laws and regulations allow the "rational use of natural resources", e.g. in terms of limiting the livestock population of Mongolian nomads. Academic stakeholders reported the need for more and better research and studies.
- **Lack of public awareness on PAs and land use regulations:** PA staff and the often-outdated Information Centers deliver a low quantity and quality of non-formal EEC for schools, eco-clubs, local residents or visitors. This gap is aggravated by the general lack of opportunities at the country's academic or training institutions for PA or other interested parties' personnel to improve their methodological EEC skills, e.g. as related to games, exercises, role plays or other interactive EEC tools.
- **Pasture degradation and overgrazing:** Problems related to inadequate livestock and pasture management as well as to insufficient pest control, watershed and plant protection have not been solved. Similar problems can be observed regarding the excessive use of natural resources such as illegal hunting or fishing or the exploitation of non-timber forest products that often lead to forest fires.
- **Excessive tourism:** Tourism imposes adverse impacts such as environmental pollution, land degradation, loss and damage of historic and cultural heritage sites, etc. But tourism is also considered a promising source of funding for PA administrations. Yet, PA administrations are sparsely staffed and have little experience in tourism. Local service providers and communities are only marginally involved in tourism while qualified guides, foreign language interpreters or other services are often lacking.

These consultation results are confirmed by a KAP survey of herders and key stakeholders in 13 sums commissioned by UNDP ENSURE in 2019, and by a 2021 KAP survey of 1,316 PA visitors and 147 PA staff in GTNP, OVNP, KKSPA, and the Western Cluster of PAs commissioned by GIZ SPACES in late 2021.

2 Target groups

Primary target groups

- **political decision makers** with the top-down impacts through policies and the allocation of funds and human resources that they can make available, and

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 Resource planning
- o5 Partner involvement
- o6 Media selection and mix

Stage 3 Production

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- **youth** with bottom-up effects through regular EEC training and infotaining activities that will instigate better understanding of the importance of the Mongolian PA system and the ecosystems and biodiversity it protects.

Secondary target groups

- the **local population** living in or close to PAs and buffer zones that is, to a high degree, identical with herders, hunters and other natural resource users that affect PAs, and
- **tourism operators** in the private sector whose business model depends on healthy ecosystems and biodiversity in the PAs, and who are in closest contact with PA **tourists and visitors**.

3 Communication objectives

Communication objectives per main problem and target group are listed in **Part 3.3 on page 12**. The objectives are differentiated by the knowledge gains (K) and the attitude (A) and practice (P) changes, which future EEC measures are intended to instigate.

For example, the communication objectives for the problem of “lack of public awareness on PAs” could be:

Problems	Major Target Groups	Communication Objectives
Lack of public awareness on PAs	school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators	<p>K Make public aware what and where PAs are, and of a visitors guideline on how to behave there, Increase an understanding of ecosystem services in PAs' and their cause-effect-relations with humans</p> <p>A Instigate a sense of ownership and love for nature and pride in Mongolian cultural heritage related to nature</p> <p>P Increase EEC activities in PAs, and improve their didactical quality Increase tourist information through print, digital & on-site information Train tour operators and guides to spread educational messages on visitors guideline, waste and sanitation, etc.</p>

4 Resource planning

The EECS requires resources in terms of time, staff, funds, etc. These resources need to be realistically determined in an action plan (see **Part 4**) in line with the capacities of MET DPAM to finance and manage EEC products and formats. The EECS and the related action plan should systematically integrate EEC products and formats that are currently implemented, or will be implemented in the near future by other parties (see **Part 3.5 and 3.6**).

5 Partner involvement

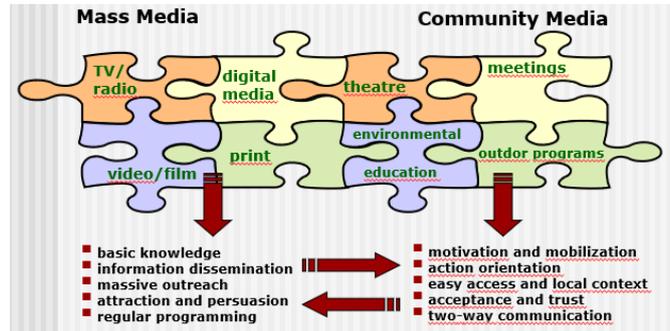
Given the limited budget and human resources available to MET DPAM, it will be necessary to win over strategic partners who can contribute to and/or co-finance future EEC measures. For example, GIZ SPACES, in 2020-2021, made media products, training manuals, and a ToolBox on EEC available, and contributed a financial agreement for the development of media-related activities and products. Additional known contributions to the EECS by UNDP ENSURE, WCS, WWF and other partners are outlined in **Part 3.6**.

6 Media mix

Experience and research show that using a combination of mass, group and interpersonal communication is most cost-effective. The media selected should be appropriate to the audiences' information-seeking habits,

preferred information sources, media access, media consumption patterns, communication networks, and group communication behavior.

No single medium is effective for all purposes or target beneficiaries. Therefore, different media and communication channels should complement and reinforce each other. Each one has a unique characteristic or particular advantage that is useful to accomplish a specific purpose. The known contributions to the EECS by GIZ, WWF and UNDP ENSURE (see **Part 3.5**) can possibly serve as a starting point for the EECS Action Plan (see **Part 4**).



For example, the media mix for the problem of “lack of public awareness on PAs” could be:

Problems	Major Target Groups	Media, communication channels, learning aids etc.
Lack of public awareness on PAs	school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators	<ul style="list-style-type: none"> ■ Toolbox on environmental education & communication (EEC), incl. ToT for teachers, rangers, NGOs, youth and EEC outdoor programs ■ PA-related theatre through drama units at schools ■ signboards, print & online media on PAs & visitors guideline ■ performing arts competitions, incl. edutainment & storytelling on PA services for schools, media, creative minds, private sector CSR ■ mass & social media campaign and user-friendly website on PAs ■ PA orientation, visitors guideline handouts for all tourism operators ■ fairs & festivals, e.g. Eagle or Crane Festival, incl. face-to-face contacts & meetings with local communities ■ PA-specific 'Green Passport' combined with App and comic ■ mobile phone SMS & Apps such as E-Bird, incl. citizen science ■ booklets & comics for youth, incl. VR through QR codes ■ animated video clips (through WA, FB Messenger)

7 Messages

The effectiveness of a communication strategy largely depends on the ability of its messages to catch the attention and understanding of the target audience. For the message to be successful, it should follow the *KISS AIDA* principle that is often used in social marketing: *Keep it short and simple* in order to catch the audience’s *Attention*, raise its *Interest* and instigate *Desire* that will lead to *Action* in relation with a desirable sustainable practice. Most people are not interested in complex issues such as the one related to PAs. When they hear or see PA-related messages, they are interested in incentives and benefits: "What's in it for me and my group or community? How does it affect me and my constituency?"

For example, the media mix for the problem of “lack of public awareness on PAs” could be:

Problems	Major Target Groups	Messages
Lack of public awareness on PAs	school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators ■ academics	<p>K 10 Facts you should know about PAs Learn how the environment affects your future, health and well-being</p> <p>A Love the animals, plants and landscapes that belong to the cultural heritage Mongolians can be proud of We care today for tomorrow! Not ego - but eco! Look at the whole PA picture, not your own interests Ask not what nature can do for you – ask what you can do for nature</p> <p>P Join fun outdoor activities/environmental initiative Set up informational boards, and spread educational messages</p>

8 Media production

The media or material selected should not be mass-produced too early in the elaboration of the EECS. The implementation of a multi-media communication strategy has a larger chance of being successful if the media materials are produced as planned and on time and if the combination of media are mobilized and coordinated as suggested. Whenever possible, all actors involved in this process should be trained accordingly. The impact and effects of the strategy's implementation should be assessed by means of a built-in formative and summative evaluation (see **Part 3.10**).

Partners of MET DPAM such as GIZ, UNDP, WWF, WCS and others are already developing and producing media, and using various communication channels and learning aids to help solve PA-related problems (see **Part 3.5 and 3.6**). Therefore, a well-coordinated multi-stakeholder approach should be used, the results of which could be compiled in a consolidated Action Plan (see **Part 4**).

9 Media use

The implementation of a multi-media communication strategy requires a good management information system that provides the organizers with rapid feedback on important strategy activities and thus helps readjusting or changing the strategy if necessary. This information system should also take care of the proper coordination of various activities that often need to be carried out simultaneously, especially if different partners to MET DPAM such as GIZ, UNDP, WCS or WWF implement activities as part of different projects (see **Part 3.5 and 3.6**).

If possible, the latter should be reinforced by non-monetary incentives and benefits such as social recognition or pride through winning a contest or engaging in an environmentally friendly activity. Also, various media and communication channels should support each other, e.g. the emotional appeal of storytelling through theater with the factual one of print media.

10 Monitoring & Evaluation

Evaluation should be made a continuous effort of EECS planners at all stages of the strategy. Its major focus should be on implementation efficiency, the effectiveness and relevance of all activities, and, most importantly, the impact and effects of the overall strategy.

Often, KAP surveys on knowledge, attitudes and practices of major target groups are conducted before or at the beginning, and again towards the end or after a project or strategy. Such before/after surveys of knowledge gains and attitude and practice changes are particularly good for monitoring and impact assessment of media, communication channels and learning aids employed in the context of EEC measures.

Steps towards an EECS Action Plan

MET DPAM together with relevant stakeholders should draft an EECS Action Plan for the period 2022-2025. This will need consultations, best achieved by means of a related stakeholders workshop in late summer or early fall 2022, and a subsequent online stakeholder exchange platform. The workshop and platform will provide a well-coordinated multi-stakeholder approach, the steps and elements of which may contribute to the realization of the envisioned Action Plan.

1. Context

Mongolia's diverse landscapes provide habitats for a large number of plant and animal species. This biodiversity forms the basis of Mongolia's economy, culture and development. To conserve biodiversity, the government has established national and local protected areas (PAs) on almost 30% of the country's area. However, climate change and the exploitation of natural resources are threatening the biodiversity and ecosystems of this extensive system of protected areas.

A large section of the rural population lives in and around protected areas. Their livelihood depends on intact ecosystem services protected to a large part by these protected areas. However, the system of protected areas has so far been unable to fully prevent environmental damage and to ensure the sustainability of ecosystem services.

Therefore, the SPACES project assists the Ministry of Environment and Tourism (MET) and its Department for Protected Area Management (DPAM) in Mongolia in its efforts to improve the framework conditions for the sustainable development and management of its PA system. The project creates the prerequisites for environmentally responsible protected area management, with the aim of conserving biodiversity and safeguarding livelihoods.

Among other measures, entertaining environmental education and communication through a variety of media and materials are planned to help residents in PAs and buffer zones, tourists and visitors, as well as experts be better informed on the importance of ecosystem protection.

To this effect, SPACES commissioned ACT Assist to develop a target group specific environmental education and communication strategy (EECS) for the PA system. The intended impact is that EEC measures will result in sound knowledge about ecosystem services and its economic and cultural importance. The associated positive attitudes and practices of local experts, communities and visitors at PAs are a premise for an effective and sustainable protected area system and the protection and valorization of ecosystems as a public good. A well-functioning partnership between PA administrations and non-government organizations (NGOs) is expected to enhance the roll-out of EEC methods, formats and products in a tried and tested multi-level approach.

In preparation of the EECS, ACT Assist conducted a situation and problem analysis and a systematic capacity needs assessment (CNA) among relevant stakeholders in Ulaan Bataar and Khovd in 1-2/2020. This CNA was updated in 1-2/2022. In total, more than 74 stakeholder consultations based on an interview guideline and a set of standard job aids related to major EECS steps were held with PA staff (34), donor (10), non-government (19) and academic (6) organizations, and media representatives (4).

While the CNA 2020 was mostly carried out through individual interviews, the SPACES team conducted the CNA 2022, due to Covid-19, mostly through targeted emails and follow-up telephone calls. The SPACES team basically asked stakeholders

- What are the top 3 problems you are facing in protected areas, and which target groups are most relevant for these problems?
- What do you want the most relevant target groups to know, feel and do in order to solve the top 3 problems you identified?
- Which media and communication channels are most appropriate to reach the most relevant target groups in relation with the top 3 problems?

Responses were documented in three JobAids related to 1-Problems & Target Groups, 2-Problems/Target Groups & Communication Objectives, and 3- Problems/Target Groups & Media/Communication Channels/Learning Aids.

Major conclusions from the CNA 2022 and a comparison with CNA 2020 results can be summarized as follows:

- Even more so than in 2020, stakeholders reported the lack of policy support related to law enforcement, finance, human resources, and particularly research & studies on biodiversity, climate change, ecosystems, etc.
- As in 2020, the lack of public awareness on PAs was again the other most mentioned problem.
- ‘Overgrazing’ and ‘excessive tourism’ were the No 3 + 4 problems in 2020 as well as 2022, mentioned especially by PA staff in the Western Cluster and universities.
- As the stakeholder group 3-Universities & Research was new in 2022, a lot more responses under Problem 1- Lack of policy support referred to the dire need for more and better research and studies. More often than in 2020, this concerns was shared by the other stakeholder groups, if only less specific.
- Even more so than in 2020, stakeholders identified political decision makers at all levels of government – in particular the cabinet and parliament, MNET and DPAM – as target groups for environmental education and communication. ‘Youth’ ran second, ‘local residents’, especially herders, third, and ‘tour operators’ fourth in 2020. This was basically confirmed in 2022 with ‘locals’ even more so than ‘youth’ and ‘PA visitors/tourists’ instead of ‘tour operators’, who however may remain important intermediaries to reach out to PA visitors.
- In the CNA 2020 and 2022, no single medium, message or communication objective is effective for all purposes or target groups. Therefore, different media, messages or communication objectives should complement and reinforce each other. Each one has a unique characteristic or particular advantage that is useful to accomplish a specific purpose that needs to be defined per problem and target group.

2. Understanding Strategy Communication

The national EECS for the Mongolian system of PAs and its action plan are based on the results and conclusions from the local partners' capacity needs assessment. ACT Assist uses a 10-step EECS toolkit developed by GIZ and OECD-DAC as a backbone. Starting from a situation and problem analysis, the guideline first looks into target groups profiles, knowledge, attitudes, and practices (KAP), and defines communication objectives from there (Steps 1-3). It is important to formulate goals in a target group-specific way. The stakeholder map in Part 3.2 provides an overview of potential groups. The strategy's required resources in terms of time, staff, funds, etc. need to be realistically determined in an action plan in line with the capacities of MET DPAM to finance and manage social media and marketing campaigns or other EEC products and formats. In addition, potential partners need to be identified, who could co-finance, assist or contribute to the EECS action plan.

This will allow putting together an appropriate mix of mass media and community-based communication channels to reach out to most promising target groups (Steps 4-6). Different media serve different functions, e.g. social media are good for mobilization but not good for learning, radio or theatre are very emotional but may be expensive in pre- and post-production. Media selection depends on many factors such as budget, national/local audience, urban/rural location, culture, or the call for action. ACT Assist applies a Head-Heart-Hand approach in EEC that aims at all dimensions of perception and learning, and fosters the upstream compatibility of EEC products, e.g. starting with a theatre play that can be recorded on video and then be shown on TV. In a country with high connectivity such as Mongolia, special attention should be paid to the use of social media and web applications within the framework of the SPACES communication objectives, budget and target groups.

In general, a high degree of flexibility is recommended in terms of (1) education and skills development formats through school/university-based or extra-curricular/non-formal environmental education or edutainment and (2) communication approaches using social marketing or media campaigns, communication for social change (C4SC), etc. to promote positive deviance from environmentally-detrimental practices. Such approaches may apply nudging through indirect suggestions and positive deviance by using change agents whose uncommon but successful practices enable them to find better solutions to a problem than their peers. ACT Assist will assist GIZ SPACES and its partners in designing the most appealing messages for strategic target groups, and recommend which media should be pre-tested and produced within the timeline and budget of the EECS (Steps 7-8). This will allow the project and its stakeholders to safeguard that the media and materials produced can reach out to targeted audiences most effectively, and that robust impact assessment methods and tools can monitor whether the strategy is reaching its goals (Steps 9-10).

The mentioned ten step approach to an EECS will be part of a training for staff of MET DPAM, PA staff and PA environmental education and information centers as well as non-government organizations (NGOs) or strategically relevant other stakeholders. First respective trainings for more than 80 participants were held in Ulaan Bataar in April 2022 (see **Part 3.6**). The ten steps will also constitute the backbone of potential media campaigns related to PAs and environmental, landscape or biodiversity conservation (see **Part 3 and 4**).

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- o5 Partner involvement
- o6 Media selection and mix

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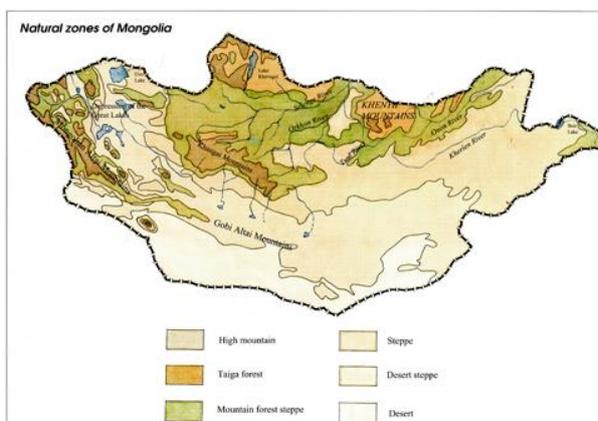
3. Environmental Education and Communication Strategy

Developing an environmental education and communication strategy (EECS) for the PA system in Mongolia is a highly complex task because the PAs' topography and ecosystems are so different, and because the target groups to be reached represent an equally wide diversity from school children to political decision makers. This complexity and the problems arising from it leads to a fundamental premise of the EECS to be developed – namely that a 'one-size-fits-all' approach would not work. Instead, its concept and implementation should be as situation and target group-specific as possible.

The country's unique geography, its traditions of nomadic livestock herding, culture and customs, and sparse population make Mongolia an important focal point for sustainable and parallel existence of human and nature and the conservation of degraded ecosystems and endangered animal and plant species.

3.1 Situation analysis and problem identification

Situation analysis The framework conditions of PAs in Mongolia are very diverse. The topographical features and ecosystems range from high mountains, taiga forests and water bodies of lakes and rivers to Eurasian steppes, the Gobi deserts and the Eastern Plains. Mongolia has 16 ecosystem types, consolidated into four ecoregions, namely the Daurian steppe, Khangai, Central Asian Gobi Desert, and the Altai-Sayan. As mentioned above, almost 20% of the country's area have been dedicated to national PAs in four major categories: strictly protected areas, national parks, nature reserves, and natural monuments.



Pasture land use and crop production dominate land use types at approximately 75% while less than 10% of the land is forested. A total of 110 species of fauna and 192 species of flora are registered in the Mongolian Red Book as either critically endangered or endangered due to hunting and habitat loss. Main drivers for biodiversity loss include mostly anthropogenic impacts such as unsustainable land use that leads to forest and pasture degradation, non-sustainable mining activities, overhunting, unregulated waste and water management, including PAs frequented by tourists, etc. These factors all aggravate existing climate change impacts happening at high speed in Mongolia.

Problem identification Findings from the interviews during the capacity needs assessment (CNA) among relevant stakeholders in 1-2/2020 and 1-2/2022 confirm the identification of most problems mentioned above. These findings are differentiated per stakeholders interviewed in Ulaan Bataar and Khovd and presented according to the chosen priority ranking (see **Annexes 1-10**).

Hence, the main problems all stakeholders can agree on, and MET DPAM may prioritize for their initial EECS measures, are:

- **Lack of political will, finance and human resources:** This includes the lack of coordination among PA and local government administrations as well as local community organizations. Many resource persons interviewed wondered why more and more PAs are established on the one hand while they are chronically under-financed and under-staffed. Some also expressed their concern that Mongolia PA laws and regulations allow the "rational use of natural resources" in at least in one of the zones of all PA categories. As unclear zone boundaries that cannot be marked in the field result in uncontrolled land and resource use activities in some zones, the genuine protection goals are not legally safeguarded. In addition, a lack of political will was observed in terms of limiting the livestock population of Mongolian nomads, who are allowed any herd structure they wish. Also, income options through entrance, hunting

or fishing fees are not properly exploited and managed to the benefit of PAs. Academic stakeholders such as universities and research organizations reported the need for more and better research and studies.

- **Lack of public awareness on PAs and land use regulations:** PA staff and the often-outdated Information Centers deliver a low quantity and quality of non-formal EEC for schools, eco-clubs, local residents or visitors. This gap is aggravated by the general lack of opportunities at the country's academic or training institutions for PA or other interested parties' personnel to improve their methodological EEC skills, e.g. by learning how to use games, exercises, role plays or other interactive EEC tools in a target group specific, purposeful and impact-oriented way. Moreover, skills training on conflict resolution, ecosystem services, or the use of GPS or cameras is scarce. Public awareness problems are often linked with a lack of visitor management and information on and in PAs, e.g. as related to entrance fees, signs and maps, visitors guideline, camping, hunting or fishing regulations etc.
- **Pasture degradation and overgrazing:** Despite many well-meaning projects in recent decades, the problems related to inadequate livestock and pasture management as well as to insufficient pest control, watershed and plant protection have not been solved. Similar problems can be observed regarding the excessive use of natural resources such as illegal hunting or fishing or the exploitation of non-timber forest products that often lead to forest fires. Fires due to people's carelessness is deteriorating forest cover, which causes lowering of groundwater levels, flash floods, and more desertification.
- **Excessive tourism:** Especially to the more frequented PAs, tourism is a blessing and a curse at the same time. Related activities impose adverse impacts such as environmental pollution, land degradation, loss and damage of historic and cultural heritage sites, etc. But tourism is also considered a promising source of funding for PA administrations. Yet, PA administrations are sparsely staffed and have little experience in tourism. Local service providers and communities are only marginally involved in tourism while qualified guides, foreign language interpreters or other services are often lacking. Tourism operators are also at the forefront of waste and sanitation problems on the one hand, and potential solutions on the other hand. They could assist in improving the low level of tourism infrastructure at campsites, hotels, ger sites, and very little tourist information such as signs, maps, designated routes, or information centers.

A case in point:

Lack of political will

The proportion of cashmere goats relative to the other major livestock types – horses, cattle, camels, sheep – increased dramatically subsequent to the country's transition from socialism to a market economy. This increase is based on short-term financial incentives but has harmful ecological consequences because of the heavier environmental impact of goat browsing. The government has not effectively intervened as programs trying to link livestock reduction to credit schemes failed. Herders reduced their herds as a whole but increased the number of cashmere goats. As a result, the carrying capacity of pastures has been further exceeded. As many goats are financed through loans, they are often labeled 'bank goats'.

These consultation results are confirmed by a 2019 KAP survey of herders and key stakeholders in 13 sums commissioned by UNDP ENSURE. Herders mentioned overgrazing, water and plant shortage, pasture degradation, and desertification as major problems. These problems, especially water shortage, are aggravated by climate change impacts. Many herders do not move around with their herds so much any longer as children are schooled at sum centers, where herder women and children often live for most of the year. This trend and keeping herds closer to fewer wells further increases overgrazing and pasture degradation.

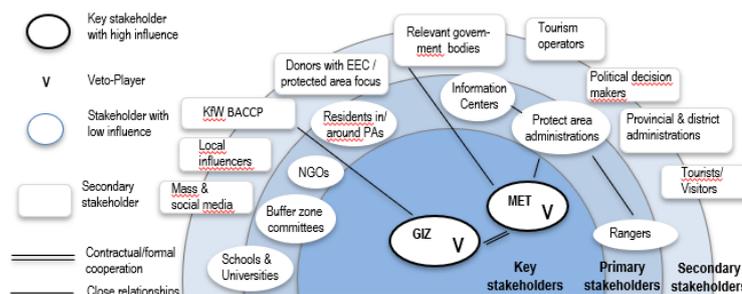
3.2 Audience and Knowledge-Attitude-Practice (KAP) analyses

At 1,564,116 square kilometers and a population of over 3.3 million people, 45% of which live in Ulaanbaatar alone, Mongolia is the 18th-largest and the most sparsely populated state in the world. Migration to urban centers, mainly for employment or education, is strong. The rural population is mostly engaged in extensive herding, and micro and small-scale enterprises and services in *Soum* and *Aimag* centers only.

Rural poverty and traditionalism are some of the reasons why natural resources such as pastures, forests, wild animals etc. in PAs and buffer zones are overexploited. A low regard for ecosystem services and biodiversity in combination with short-term income generation and profit needs results in non-sustainable practices and livelihood threats. The cashmere goats mentioned above are a good case in point.

Mongolian pastoralism has been transformed into a form of animal husbandry during Soviet times and underwent a transition into a market economy in the 1990s. As a result, herders became highly mobile, giving them more profitable access to both natural and social resources while roaming not too far away from *Soum* and *Aimag* centers, where herder children are schooled and families tend to take regular residence. Therefore, the prominent environmental issue in Mongolian grasslands is the reduction and loss of usable pastures for nomadic pastoralism, which also affects the system of PAs.

The rural population living in or between PAs and the buffer zones is therefore a major target group of the EECS. The adjacent stakeholder map positions key, primary and secondary actors.



Findings from the CNAs in 1-2/2020 and 1-2/2022 identify the following major target groups for an EECS, again differentiated per stakeholders and presented according to the chosen priority ranking (see **Annex 1-10**).

The two main target groups per problem that all interviewed stakeholders can agree on, and MET DPAM may prioritize for their initial EECS measures, can be recommended by means of a two-pronged approach:

- **political decision makers** with the top-down impacts through policies and the allocation of funds and human resources that they can make available, and
- **youth** with bottom-up effects through regular EEC training and infotaining activities that will instigate better understanding of the importance of the Mongolian PA system and the ecosystems and biodiversity it protects.

There are two more heterogeneous target groups mentioned by all interviewees and essentially linked to both problems and problem-solving approaches related to PAs, namely:

- the **local population** living in or close to PAs and buffer zones that is, to a high degree, identical with **herders, hunters** and other natural **resource users** that affect PAs, and
- **tourism operators** in the private sector whose business model depends on healthy ecosystems and biodiversity in the PAs, and who are in closest contact with PA **tourists and visitors**.

For MET DPAM and PAs, the difference between these groups lies in strategic considerations: Intervention with which groups have the highest probability of success? Which interventions have the highest impact? Which groups are easiest to access? Which groups are most likely to increase their knowledge and change their attitudes and practices in relation with PAs? Which groups would benefit or lose the most from interventions that aim at increasing knowledge and changing attitudes and practices in relation with PAs?

In relation with such strategic concerns, **political decision makers** have a high regulative and institutional impact through policies and law enforcement. It may be difficult to access and to convince them in terms of new information and the necessity to change directions but their clout is worth the effort to reach out to them through targeted measures. **Youth** as the future of Mongolia is easy to access and motivate to learn and change attitudes and practices so that green school, eco-camp and outdoor EEC activities have a high chance of success. Therefore, EEC measures and trainings – incl. training-of-trainers and national and local capacity development on EEC methods and tools – are highly recommended. At least the older strata of the **local population** are logistically much more difficult to access because their homes are highly dispersed, and they are mostly risk-averse in taking in new facts, opening to innovations or changing directions. Outreach to this target group should rely on trickle-down effects from youth programs, support to face-to-face

communication of local NGOs, herder or buffer zone committees, and mass mediated messages assisted and co-financed through the donor community and the private sector.

Tourism operators – also local ones with their guides and other service providers – should have a high self-interest in healthy PAs as their business model depends on them. Running camps, shops, horse riding, trekking or other tours, etc., they have the most direct contact with visitors and tourists – more even than rangers and the PA administration. They can, therefore, play an important intermediary role in relation with measures ultimately targeted both at **visitors and tourists** – e.g. codes of conduct, waste and sanitation management, tourist information, signs and boards, etc. – but also at **community service providers** through a variety of sustainable income generation activities.

The mentioned UNDP ENSURE KAP survey in 2019 revealed major attitudes and media preferences among herders and key stakeholders. For example, 60% of herders stated that pasture degradation is not their problem, and 45% believe that nature will remedy the problem anyway. Instead, they attribute the problem to climate change (90%), an inactive government (85%) and human impact in general (70%). Solutions are sought in livestock management (50%), rational pasture allocation (21%), and building wells (23%). While 86% of respondents state that PAs are necessary to protect wildlife, 55% also answer that this is not their problem and show a very high percentage of "Don't know" answers in respect with the benefits of wildlife (e.g. 58% for leopard, 45% for musk and marmot).

Another KAP survey commissioned by GIZ SPACES in late 2021 confirmed stakeholder consultation results as well from a different perspective. The overall knowledge score of 1,316 PA domestic visitors on PA maintenance and management, PA features and a PA-related visitors guideline was 11.72 out of 30 points. Among 147 PA staff in GTNP, OVNP, KKSPA, and the Western Cluster of PAs the overall score was 19.2 out of a maximum of 30 points. When asked about the reasons for maintaining and managing PAs domestic visitors scored 3.96 points out of a maximum of 10 points, while it was 5.96 for PA staff. Interestingly, more than one out of four participants (27.3%) did not know the correct name of the PA they visited and were interviewed in. In respect with the features of the PA they visited and were interviewed in, visitors were more familiar with the names of the animals than with the PA's landmarks, rivers, lakes and plants. Their overall score was 5.03 out of a maximum of 10 points, while for PA staff it was 8.43. Regarding a visitors guideline on what to do and not to do when visiting a PA, the overall knowledge score level was the lowest of all: 2.78 out of 10 for domestic visitors, and 5.12 for PA staff. Over 80% of domestic visitors and 70% of PA staff had not seen and/or read comics providing information on wildlife or landscape protection. Most respondents (58.6%) did not have information about PAs before their visits. The prevailing sources of information about PAs were verbal (informal) information (23.4%), followed by the internet (14.0%) and social media (11.0%).

Moreover, WWF conducted KAP surveys among around 100 people from the Khentii and Sukhbaatar aimags near the Khar Yamaat Nature Reserve in 2014, 2016 and 2018. Even though more and more people stated they know "very much" or "much" about the PA, the percentage of those who answered "little" or "no idea" was the wide majority: 72% / 12% in 2014, 59% / 5% in 2016 and 39% / 3% in 2018. Respondents also were not aware of the laws (36%) and responsibilities (34%) regarding prohibited activities in the PA.

3.3 Communication objectives

Based on the prioritized problems and major target groups identified so far, communication objectives as listed below can be formulated. The objectives are differentiated by the knowledge gains (K) and the attitude (A) and practice (P) changes, which future EEC measures are intended to instigate.

A case in point Selecting the right intermediaries

Results of a UNDP KAP survey in the GTNP in 2019 showed that around 80% of interviewees consider the area as purely a tourist destination, more than 68% of them believe that the land is inhabited by invisible spirits, and more than 84% of them understand the environmental impacts of improper waste management. However, it was observed that most of the park visitors dispose of their waste illegally and/or leave wherever they camped or picnicked. This indicates that visitors view nature in purely consumptive terms, and that traditional cultural practices have been changed. Therefore, working with spiritual leaders or cultural beliefs alone will most probably not be successful in any EEC campaign or strategy.

Problems	Major Target Groups	Communication Objectives
Lack of political will, finance, and human resources	parliament ■ national & local government ■ other relevant authorities at national, aimag and soum level ■ other relevant political decision makers ■ academics	<p>K Make relevant government officials and institutions aware of major challenges, threats, and trends as well as the financing and human resource needs of PAs</p> <p>A Instigate a feeling of urgency regarding the need for effective measures to support the PA system in a sustainable and future-oriented way Instigate pride of government officials and institutions as far as their lack of political will is concerned to take up effective market-based and legal incentives and sanctions to support and sustain the PA system</p> <p>P Limit land, grazing, and tourism licenses effectively Integrate increased entrance and hunting fees in PA operational budget and/or community processes Increase law enforcement at all levels Integrate market-based and legal incentives and sanctions in the revised National PA Plan 2020-2025 that effectively combat overgrazing, excessive tourism and other environmentally detrimental practices Allocate sufficient financial resources to fund infrastructure, public awareness and M&E measures related to the National PA Plan Contract and train sufficient human resources to safeguard the infrastructure, public awareness and M&E measures related to the National PA Plan</p>
Lack of public awareness on PAs	Academics, school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators ■	<p>K Make public aware what and where PAs are, and of a visitors guideline on how to behave there, Increase an understanding of ecosystem services in PAs', especially pastures, forest and wildlife, and their cause-effect-relations with humans</p> <p>A Instigate a sense of ownership and love for nature and pride in Mongolian cultural heritage related to nature</p> <p>P Increase and improve didactical quality of EEC outdoor activities in PAs Increase tourist information through print, digital & on-site information Train tour operators and guides to spread educational messages on visitors guideline, waste and sanitation, etc.</p>
Overgrazing, pasture & forest degradation and excessive resource use	national & local government ■ herders/local population ■ PA admin/rangers ■ buffer zone councils ■ community associations ■ visitors ■ resource & NTFP users ■ academics	<p>K Increase public awareness about the What, Who, When and Why of resource use and the losses these cause for the common good and people's livelihood Know the law (and everybody's role and responsibility)</p> <p>K Make herders and visitors aware of major trends and long-term effects of overgrazing, pasture and forest degradation</p> <p>A Instigate an appreciation of the major benefits of natural resources as a common good and why these should be protected from selfish interests</p> <p>A Instigate concern about herder children's future and livelihood if natural resources are not sustained, and strengthen the connection to nature</p> <p>P Increase the number of people who follow sustainable resource use practices Increase the number of herders who keep their livestock numbers within the carrying capacity of grazing grounds Support research on simple pasture carrying capacity models that herders and other stakeholders can be trained on Community-based pilot activities re sustainable resource use financed on competitive basis</p>

Problems	Major Target Groups	Communication Objectives
Excessive tourism, incl. improper waste management & sanitation	local government ■ local population, incl. herders and ■ schools ■ visitors ■ PA admin/rangers ■ SWM and sanitation operators ■ tourism operators	<p>K Make tourism operators aware of major trends and long-term effects of PA tourism</p> <p>K Increase public awareness about proper waste management & sanitation and how these are related to health and well-being issues</p> <p>A Instigate concern about tourism operators' future if natural resources, which their business model depends on, are not sustained</p> <p>A Instigate pride & appreciation for a clean and healthy PA</p> <p>P Increase the number of tourism operators who keep their operations within the carrying capacity of a PA</p> <p>P Increase the number of households and economic units that follow waste and sanitation regulations</p> <p>Increase private-public cooperation and co-management among rangers, schools, tourism operators, community members, etc.</p> <p>Increase participation of local service providers/communities in revised PA regulations, incl. obligation to associate a local guide to tourist groups, a list of local service providers per PA, basic level English language training for local service providers, etc.</p>

It should be kept in mind that communication objectives are not the same as policy objectives and they are not the same as the communication itself. For example, publishing a brochure or holding a workshop may be important activities in the EECS but are only means to an end and not the end itself.

At a later stage, such communication objectives need to be defined in more detail depending on the specific problems and target groups to be prioritized, and the media products and communication channels to be used (see **Parts 3.4-3.6**).

3.4 Resource planning

The EECS requires resources in terms of time, staff, funds, etc. These resources need to be realistically determined in an action plan (see **Part 4**) in line with the capacities of MET DPAM to finance and manage EEC products and formats. The EECS and the related action plan should systematically integrate EEC products and formats that are currently implemented, or will be implemented in the near future, by other parties such as donor or NGO organizations (see **Part 3.5 and 3.6**). Resource planning at this point first of all means strategy development ("What to do?"), while management planning ("How to do it?") takes over at a later stage (see **Part 3.8 and 3.9**). This is best achieved by taking a close look at the results of EECS steps 1-3 while doing a reality check regarding steps 5-10.

The need for and importance of local or regional infrastructure such as environmental education training centers (EETCs) cannot be underestimated. EETCs or similar infrastructure on a local or regional level that provide a training venue and limited space for accommodating trainees – e.g. school students, eco-clubs, NGO facilitators, PA experts. etc. – constitute a physical location where EEC activities can take place regularly and systematically. Only a very few PAs in Mongolia have such EETCs, and most of these are in a bad shape, both physically and pedagogically. The BACCP program of KfW has started filling this gap by sectoral investments spanning protected areas. This included various construction measures such as information and training centers, ranger housing, and administration buildings.

3.5 Partner involvement

Given the limited budget and human resources available to MET DPAM, it will be necessary to win over strategic partners who can contribute to and/or co-finance future EEC measures. For example, GIZ SPACES,

in 2020-2021, has made two manuals and training workshops on EEC and interactive PA-related training methods and tools available, developed a modular visitors guideline (CoC) for PAs, produced animated video clips on this CoC and PA policies and management, and designed standard templates for a flyer and an info-board related to PA-related activities, locations, etc. In addition, a mobile app on travel route maps and a national biodiversity information website and mobile app was developed, launched in 6/2022. GIZ also contributed a financial agreement for the development of media-related activities and products to MET DPAM in 2020. In order to integrate these products and services into the EECS, MET DPAM received further assistance, coaching and training in early 2022.

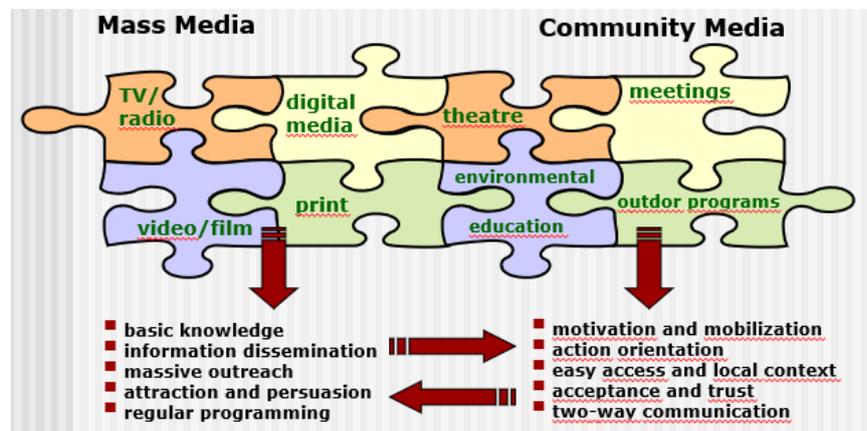
Additional known contributions to the EECS by UNDP ENSURE, WCS, WWF and other partners are outlined below (see **Part 3.6**).

3.6 Media selection and mix

Environmental communication is the planned and strategic use of communication processes and media products, communication channels, and learning aids to support effective policy making, public participation and project implementation geared towards environmental sustainability. In this case, environmental communication is the missing link between environmental issues and problems in respect with Mongolian PAs and the related socio-political processes of policy making and public participation.

Experience and research show that using a combination of mass, group and interpersonal communication is most cost-effective. Based on the previous results of audience and KAP analyses and the preliminary considerations regarding the involvement of partners, an effective multi-media mix should be developed. The media selected should be appropriate to the audiences' information-seeking habits, preferred information sources, media access, media consumption patterns, communication networks, and group communication behavior.

The rationale is that a coherent and coordinated system of communication should be able to address specific but varied information, attitude and behavior problems and needs of intended beneficiaries. No medium is effective for all purposes or target beneficiaries. Therefore, media should be selected and used for a single or specific rather than for different information, educational and communication objectives.



Different media and communication channels should complement and reinforce each other. Each one has a unique characteristic or particular advantage that is useful to accomplish a specific purpose.

Findings from the CNAs in 1-2/2020 and 1-2/2022 identify the following major media, communication channels and learning aids for an EECS (see **Annex 1-10**).

Problems	Major Target Groups	Media, communication channels, learning aids etc.
Lack of political will, finance, and human resources	parliament ■ national & local government ■ other relevant line agencies/ authorities ■ academics	<ul style="list-style-type: none"> ■ animated video clips ■ factsheets/flyers with text and visual information (e.g. info graphics) ■ online TED talks & televised expert talk shows with politicians ■ training module on PA-related fund raising and proposal writing ■ nationally harmonized standard operational procedures (SOP) for PA staff, incl. leaflets on instructions for specific tasks
Lack of public awareness on PAs	Academics, school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators	<ul style="list-style-type: none"> ■ Toolbox on environmental education & communication (EEC) ■ ToT for teachers (re- and in-service), rangers, local NGOs, youth on EEC outdoor programs and use of Toolbox ■ EEC programs & field trips involving teachers, youth using the Toolbox ■ PA-related theatre through drama units at schools ■ signboards, maps, factsheets & online media on PAs & visitors guideline ■ (local) training on PAs for journalists, change agents, NGOs ■ performing arts competitions, incl. edutainment & storytelling on PA services for schools, media, creative minds, private sector CSR ■ mass & social media campaign and user-friendly website on PA services ■ PA orientation, visitors guideline handouts for all tourism operators ■ fairs & festivals, e.g. Eagle or Crane Festival, incl. face-to-face contacts & meetings with local communities ■ PA-specific 'Green Passport' combined with App and comic ■ mobile phone SMS & Apps such as E-Bird, incl. citizen science ■ booklets & comics for youth, incl. VR through QR codes ■ animated video clips (through WA, FB Messenger) ■ public events, e.g. in Sukhbaatar square, that focus on PAs' importance ■ video clips for bus and plane passengers from and to PA areas
overgrazing, pasture & forest degradation and excessive resource use	national & local government ■ herders/local population ■ PA admin/rangers ■ buffer zone councils ■ community associations ■ visitors ■ resource & NTFP users ■ academics	<ul style="list-style-type: none"> ■ social media campaign through Facebook groups, smartphone SMS, Apps ■ signboards, maps, factsheets, online media on PAs & visitors guideline ■ infotainment & school activities incl. community theatre on problems & solutions related to non-sustainable resource use ■ consultations with all stakeholder groups on sustainable resource use ■ face-to-face herder forum, incl. top-herder as change agent ■ fairs & festival events, incl. infotainment through theatre ■ skills training for rangers & locals on sustainable resource use ■ synchronized mass media infotainment on sustainable resource use, e.g. through Malchin (Herder) TV, MNB TV, Eco-TV, local public radio ■ podcasts with herders & local government through local radio
excessive tourism, incl. improper waste management & sanitation	local government ■ local population, incl. herders and ■ schools ■ visitors ■ PA admin/rangers ■ SWM and sanitation operators ■ tourism operators	<ul style="list-style-type: none"> ■ signboards, maps, factsheets, online media on PAs & visitors guideline ■ infotainment & school activities incl. community theatre on tourism, SWM & sanitation problems & solutions ■ stakeholder consultations on sustainable tourism, SWM & sanitation ■ synchronized mass media infotainment plus face-to-face communication on new tourism concepts, SWM & sanitation systems through local government, rangers, tourism & SWM operators ■ CSR-sponsored fairs & festival events, roadshows and WASH campaigns on SWM & sanitation system, incl. infotainment through theatre ■ herder cooperative meetings to identify tourism-related services ■ English/Mongolian booklet with common phrases for basic communication with tourists ■ MNB TV and monthly programs on local public radio ■ video clips for bus and plane passengers from and to PA areas

It has to be kept in mind, that information and communication alone will not directly solve PA-related problems. In addition, market-based and legal incentives are needed, for example, to target

- herders in respect with overgrazing, e.g. livestock-specific taxes, grazing fees, training on livestock management and quality, or
- tourism operators in respect with excessive tourism, e.g. limit tourism licenses while increasing license fees.

In both cases, measures should be combined with tax incentives or linking loans/grants/revolving funds with long-term environmental investments, competitive finance, robust monitoring systems etc.

At a later stage, the listed media, communication channels and learning aids need to be selected and defined in more detail depending on the specific problems target groups and communication objectives to be prioritized, and the media products and communication channels to be used (see **Parts 3.1-3.5 and Part 4**). To this end, the known contributions to the EECS by GIZ (see **Part 3.5**) and the ones by WWF and UNDP ENSURE outlined below should be taken into consideration. In addition, KfW BACCP financed so-called eco-cabinets or toolboxes with teaching and research tools, manuals and a set of materials to teachers and students of grades 1-12 and capacity building for teachers for 48 secondary schools in the Buffer Zone of Ulaanbaatar PA. These contributions can possibly serve as a starting point, and provide best practices and/or research data and informed choices regarding media preferences, for the EECS Action Plan (see **Part 4**).

In respect with the EECS Action Plan, more than 50 participants – from PAs, NGOs, government, research and donor organizations – in a 3-day EEC workshop organized by GIZ SPACES in April 2022 established a Facebook Group “My Green Mongolia. EEC for a Sustainable Future”. One of their working groups discussed the concept of a national EEC campaign. The participating organizations made commitments to contribute to a potential campaign (see **Part 4**):

- UNDP ENSURE: Training modules developed for herders, online platform developed, handbooks, PA management, etc.
- WWF: School curricula, horse and camel campaign by local young people, experienced in video content development, range of data and research, etc.
- KTT and Khustai PA: Best practices of Takhi horse re-introduction, sheep feast events among herders, NGO management, etc.
- Nomadic Nature Conservation: Mobile Conservation Trunk (puppets, learning & teachers’ aids), facilitation tools, etc.
- TNC: Best practices on volunteer rangers, video content development on community-based organizations, etc.
- Ecological Police: Online social event organizations, posters, video content, factual message design, etc.
- Fresh Water Center: Networking with government agencies, hosting the campaign secretariat, workshop venue, facilities etc.

Another GIZ SPACES 2-day workshop for more than 30 PA communication officers in April 2022 identified best-practice examples of successful communication activities in PAs:

- National TV program “Big Brother Trip” in Khugni Tarna PA, in which school kids traveled to PAs and met local elderly herders who explains them about PA, its features and the traditional way of protecting the local nature. The nationwide program had five series, broadcast three times, and reached 300,000 viewers.
- Cedar forest rehabilitation in Tuijin Nars PA that involved PA administration, local government, national TV, journalists, celebrities and the Zuunii Medee newspaper based on the slogan “Save Tuj Cedar Forest”. Various donors funded the TV and newspaper programs, which resulted in planting 20 hectares of cedar trees.
- TNC in cooperation with social marketing specialists from RARE organized the “Our Pride is Taimen” campaign along the Tuul and Onon river. The activity was to protect taimen, whose number

dramatically decreased due to illegal fishing. Local people, kids and fishermen participated received training on how to protect this species. Different events and competitions were organized among local people/fishers and local kids. A fishermen's club organized eco-fishing tours. The club became an NGO, created a Facebook Group joined by 2,500 people who promote the trend to catch taimen and release them back into the river.

- The Vulture program in Ikh Nart PA was facilitated by school teachers to increase awareness among kids about the endangered species. Students were involved in-class, and visited the PA to learn more about vultures. They reported their experiences and newly gained knowledge to parents, family and neighbors during Environment Day events at the soum level.

PA communication officers who participated in this 2022 workshop also developed draft communication plans for three "virtual" protected areas in the "Northern", "Gobi" and "Western Steppe" areas.

The KAP survey commissioned by GIZ SPACES in 2021 among PA visitors revealed that a majority of respondents (53.2%) did not have general information about PAs before their visits and no particular information (62%) on a visitors guideline. Their sources of information about PAs were mostly verbal, informal information (23.4%), followed by the internet (14%) and social media (11%). TV programs (2.5%), or info boards (1.6%) other media (less than 1%) hardly played any role as a source of information. PA-related guidelines for visitors were communicated, if at all, through social media (10.4%), verbal information (8.5%), the internet (7.4%), TV (7.3%), or info boards (3.1%). Verbal information played the same role across all age groups and genders. However, the internet and social media were much more popular among young visitors compared to middle-aged and the elderly ones.

A similar but limited KAP survey was conducted by the Mongolian Ecology Center (MEC) in the Hovsgol Aimag's National Parks in 2021.

The mentioned UNDP ENSURE KAP survey in 2019 confirmed media preferences among relevant herders and other stakeholders in respect with PAs. Regarding the sources of environmental and agricultural information, 91% resp. 23% of herders rely on national resp. local TV, 15% on the internet, 9% on national radio, 7% on meetings, 4% on neighbors, and 2% on SMS and local radio. Women use more TV/web/neighbors/SMS, while men's preferences are local TV and national as well as local radio. The latter is also true for older age groups while younger ones rely more on internet and smartphone services. The most watched TV channels are MNB (76%), Malchin/Herders TV (68%). On Facebook, Malchin TV has as many clicks as MNB. The most watched programs are news (76%), herder news (33%), herder music (31%), serials (18%), training for herders (14%), children cartoons (5%), and animal husbandry (3%). Peaks hours are 6-11 p.m. In general, stakeholders receive main messages on best practices through training, meetings, and TV channels.

In 2020, the UNDP ENSURE project started cooperating with Malchin TV to disseminate regularly information to rural target group, especially herders through public spots and branded programs. Broadcasting news on MNB are to be produced by cooperating with a journalist. In addition, ready-made contents on local TV stations are to be broadcast. A dedicated nationwide radio program with 10 minutes every Thursday at 15.30 pm has been in cooperation with MNB Radio. Also, the project has launched a podcast on soundcloud.com and broadcasts interview and radio programs aired by MNB. Herders may be

A case in point The UNDP waste management campaign at the Gorkhi Terej PA in 2019

UNDP used social and behavior change communication (SBCC) with three interventions: 1. Signs with messages showing the correct behavior in park locations with the highest amount of waste dumping. 2. Maps with waste disposal points for visitors as they enter the park. 3. Garbage bags with a map of waste disposal points distributed by a supermarket near the park.

As a result, 86% of waste was collected in the container near the entrance gate - 3 times higher than the targeted 30%. People respond positively, when the message is delivered in the immediate time frame prior to their opportunity to behave. If people expect a clean environment, this will help perpetuate a norm that people do not litter.

Visitors were still dumping their waste near the container site even when the container was removed. This shows that once a certain amount of rubbish has accumulated in a specific place, it may then give the appearance of being the "designated" rubbish disposal area, and to create a perceived norm of these had not been considered previously. The supermarket definitely was an important intervention point.

provided with small transistor radios to receive the programs. The project is developing short video stories on how communities are supported, and documentaries about marmot and musk deer. Handouts on indicator species such as snow leopard, gazelle, argali sheep, red deer were developed and printed to be distributed to local target communities for knowledge gains on wildlife conservation. A project website and Facebook page as well as a newsletter regularly feed news about project activities. Daily news through newspapers such as the Government News and the Zuuny Medee aims at providing older, urban citizens, especially office and government employees, with conceptual information. In addition, a monthly corner in the herders' magazine Malchin is planned. The project may develop its own website named Malchin (herder) to attract this specific target group. Finally, PA-related street boards along the roads to/from soum and/or aimag centers are planned to be set up.

In 2020, WWF financed a month-long Green Voice campaign in cooperation with the Ecological Police and a dedicated Facebook page. The focus of the page is clearly on improper waste disposal and slogans to avoid this practice. The messages are mostly normative appeals ("Do this! Don't do that!") combined with law enforcement and threat of punishment.

In 2012, the World Conservation Society (WCS) commissioned a KAP survey among citizens, traders, rangers and herders on the WCS PRIDE campaign ("Healthy Environment for Healthy People") on hunting regulations for gazelles in 2009-2012. The campaign had focused on key stakeholder meetings to introduce hunting permit issues, herder perception and support from soum-level volunteer rangers to distributed law regulations to soum-based hunters. FM radio and TV channels complemented correct information to hunters by media and key stakeholders support points. The NGO Nature Nomadic Conservation organized environmental education ('Travelling Trunk') training for herder community leaders and key stakeholders' staff, which included campaign materials such as posters and brochures. Based mostly on interpersonal communication, hunters were aware of the new regulations and followed them as they already had some knowledge and positive attitudes towards the campaign objectives. The statement that hunters "strongly agree" to follow regulations to protect wildlife was increased from 29% to 42%. The number of hunters who talked to others about threats to the Mongolian gazelle increased from 33% to 72%. Volunteer ranger workshops had a great impact on hunters.

3.7 Message design

The effectiveness of a communication strategy largely depends on the ability of its messages to catch the attention and understanding of the target audience. Therefore, messages must be designed to fit the specific characteristics, educational and intellectual horizon and the aspirations of each group of intended beneficiaries. Also, they should fit the media selected.

For the message to be successful, it should follow the *KISS AIDA* principle that is often used in social marketing: *Keep it short and simple* in order to catch the audience's *Attention*, raise its *Interest* and instigate *Desire* that will lead to *Action* in relation with a desirable sustainable practice. In addition, the information should also be accessible, accurate, verifiable, complete, timely, and relevant.

The positioning of a message should ensure validity and relevance, facilitate informational, motivational or action needs and identify a message focus or theme according to the strategy's issue or objective. As normative appeals ("Do this! Don't do that!") usually do not work, themes should be made attractive and persuasive by 'packaging' the message utilizing psychological or social appeals such as fear-arousal, incentives, role model or civil duty. Also, themes should be given a special treatment in line with the strategy's objectives that could be humorous, popular, fact-giving or conclusion-drawing.

A case in point

Message design for visitors guideline in PAs

Too many negative or prohibitive messages generate apathy or resistance instead of positive action and change. Therefore, love of nature as a driver for public behavior should be emphasized at least as much as the loss of biodiversity. 'Love not Loss' is a powerful social marketing tagline often used in environmental conservation. For example, a visitors guideline for PAs developed by GIZ SPACES balances what visitors of a PA can enjoy when experiencing nature and what they should avoid doing as to maintain a healthy environment.

Message design should be differentiated per target groups and thematic issue or problem. This particularly holds true for young and urban audiences that experience high information overflow. Therefore, improving quality content, and regular programming over longer periods of time of at least half a year are needed to heat up society with messages and establish trust with specific audiences. As the Mongolian proverb goes „Don't stuff a whole bread into a person's mouth but cut it into small loaves, flavored with cream and fruit jams." Correct, clear and concise messages will help foster an understanding for PAs and their role in preserving ecosystems and biodiversity.

Based on the prioritized problems and major target groups identified so far, major messages as listed below can be formulated. The messages are differentiated by the knowledge gains (K) and the attitude (A) and practice (P) changes, which future EEC measures are intended to instigate.

Problems	Major Target Groups	Major Messages (Knowledge-Attitudes-Practices)
Lack of political will, finance, and human resources	parliament ■ national & local government ■ other relevant line agencies/ authorities ■ academics	K 10 Facts you should know about the PA system in Mongolia: Major challenges, threats, trends, tipping points, solution-oriented options, best practices A For the sake of your country's future - Don't destroy the natural resources your economy and your people's livelihood depend on P Adjust your policy and legal framework related to PAs by setting market-based and legal incentives for herders, tourism operators and other relevant stakeholders to combat overgrazing, excessive tourism and other environmentally detrimental practices Make sufficient financial resources available to safeguard the infrastructure, public awareness and M&E facilities necessary to protect PAs within the mentioned framework Make sufficient human resources available to safeguard the infrastructure, public awareness and M&E facilities necessary to protect PAs within the mentioned framework
Lack of public awareness on PAs	Academics, school teachers & students ■ eco-clubs ■ PA admin/rangers & Info Centers ■ local population/herders ■ buffer zone councils ■ local media ■ NGOs ■ tourism operators	K 10 Facts you should know about PAs Learn about how your environment is connected to your future, health and well-being Introduce clear strategic goals for visitor management measures. A Love the animals, plants and landscapes that belong to the cultural heritage Mongolians can be proud of We care today for tomorrow! Not ego - but eco! Look at the whole PA picture, not only after your own interests For the sake of your children's future - Don't destroy the natural resources your livelihood depends on Ask not what nature can do for you – ask what you can do for nature Nature gives you life - Give nature something back every day P Join the fun outdoor activity ABC / environmental initiative XYZ in the specific DEF PA Set up informational boards, and have tour operators and guides spread educational messages

Problems	Major Target Groups	Major Messages (Knowledge-Attitudes-Practices)
overgrazing, pasture & forest degradation and excessive resource use	national & local government ■ herders/local population ■ PA admin/rangers ■ buffer zone councils ■ community associations ■ visitors ■ resource & NTFP users ■ academics	<p>K 10 Facts you should know about overgrazing 10 Facts you should know about sustainable resource use: What-who-where-when-why etc. Learn about major benefits of natural resources and why these should be protected</p> <p>A For the sake of your children's future - Don't destroy the natural resources your livelihood depends on This range land does not belong to you - It belongs to future generations Not ego - but eco! Look at the whole PA picture, not only after your own interests Don't take out selfishly what belongs to the whole community</p> <p>P Adjust your herds to the carrying capacity of your grazing grounds Make sure you don't take out more than will grow back</p>
excessive tourism, incl. improper waste management & sanitation	local government ■ local population, incl. herders and ■ schools ■ visitors ■ PA admin/rangers ■ SWM and sanitation operators ■ tourism operators	<p>K 10 Facts you should know about tourism in PAs 10 Facts you should know about solid waste management Learn about major benefits of proper SWM and recycling and how this is related to your health and well-being</p> <p>A For the sake of your children's future - Don't destroy the natural resources your livelihood depends on Not ego - but eco! Look at the whole PA picture, not only after your own interests Don't mess up what you are looking for, namely a clean and healthy environment in a PA Not ego - but eco! Look at the whole PA picture, not only after your own interests Good/Proud Mongolians do not litter!</p> <p>P Adjust your tourism operations to the carrying capacity of your PA Pick up your waste and deposit it at designated collection points</p>

The main difference between the communication objectives (see **Part 3.3**) and the message is that you do not necessarily and directly have to talk about ecosystems and biodiversity related to PAs. Most people are not the least interested in such complex and often sensitive issues. What they are interested in is: "What's in it for me and my group or community? How does it affect me and my constituency?" They are interested in incentives and benefits, and they want to know about the price they have to pay or the effort they will have to make in return for enjoying these advantages. For example, "If you participate in this dialogue on solving PA problems with other stakeholders, you will be able to influence the design of policies and regulations that work well for you and your community."

The effectiveness of the EECS depends largely on how clear and attractive the messages are for the target audience. The audience must understand the message – not the communication experts or MET DPAM. Any message should therefore be designed to suit the specific characteristics, the educational and intellectual background, and the values and aspirations of the respective stakeholder group: *"It's the fish, not the angler, who should like the taste of the bait."*



At a later stage, such messages need to be defined in more detail depending on the specific problems and target groups to be prioritized, and the media products and communication channels to be used (see **Parts 3.1-3.6**).

3.8 Media production and pre-testing

The media or material selected should not be mass-produced too early in the elaboration of the EECS. The implementation of a multi-media communication strategy has a larger chance of being successful if the media materials are produced as planned and on time and if the combination of media are mobilized and coordinated as suggested. Whenever possible, all actors involved in this process should be trained accordingly. The impact and effects of the strategy's implementation should be assessed by means of a built-in formative and summative evaluation (see **Part 3.10**).

In general, a clear briefing of all media designers and producers on communication materials regarding content, design, persuasion and retention rate should be undertaken. Precise plans for each material should be made, and all staff should be informed on involvement and timing. External communication experts may take over specialized tasks such as pretests before producing larger quantities of material. Integrated production timetables including all media employed should be determined precisely. Planning tools such as the one below may already be drafted in the EECS' step 4 (see **Part 3.4**) but will be fully applied at this step.

Communication channels (media, dialogue platforms, learning aids)	Audience (primary stakeholders)	Communication context	Production & distribution responsibility (incl. intermediaries & partners)	Budget & other resources (incl. human and logistical)	Time line

As mentioned in **Part 3.5 and 3.6**, partners to MET DPAM such as GIZ, UNDP, WWF, WCS and others are already developing and producing media, and using various communication channels and learning aids to help solve PA-related problems. If these activities could be integrated on a time line in such a way that they complement and reinforce each other (see **Part 3.4**), the isolated impact of individual activities could be multiplied. Therefore, a well-coordinated multi-stakeholder approach should be used, the results of which could be compiled in a consolidated Action Plan (see **Part 4**).

3.9 Media use & field implementation

At this point in the EECS process management planning takes over from strategy development. The implementation of a multi-media communication strategy requires a good management information system that provides the organizers with rapid feedback on important strategy activities and thus helps readjusting or changing the strategy if necessary. This information system should also take care of the proper coordination of various activities that often need to be carried out simultaneously, especially if different partners to MET DPAM such as GIZ, UNDP, WCS or WWF implement activities as part of different projects (see **Part 3.5 and 3.6**).

Realistic time estimates should therefore be considered carefully per media and social group, considering the most appropriate events, occasions, times and places. If possible, the latter should be coordinated with mass media inputs, and reinforced by at least non-monetary incentives and benefits such as social recognition through winning a contest or pride and contentment through engaging in an environmentally friendly activity for the common good. Also, various media and communication channels should be 'cross-fertilized', e.g. the emotional appeal of storytelling through theater with the factual one of print media. Multiplication effects among various media used should be planned for, e.g. a TV show about a theater

performance of a group of eco-club students. Again, such coordination and complementation can and should be achieved even across the borders of partner projects. To this end, joint events could be organized by several partners that stage media inputs such as festivals, VIP visits etc. To MET DPAM, using such platforms means 'piggy-backing', i.e. getting a free ride on existing communication channels or other institutions' outlets and budget.

3.10 Process documentation and M&E

Evaluation should be made a continuous effort of EECS planners at all stages of the strategy. Its major focus should be on implementation efficiency, the effectiveness and relevance of all activities, and, most importantly, the impact and effects of the overall strategy.

There are different types of evaluation: Ex-ante appraisals are part of planning to estimate what effects should be expected. Formative evaluation during implementation assesses whether the program is on course. Ex-post impact assessment soon after implementation ascertains the effects of the intervention and rates their sustainability. Often, KAP surveys on knowledge, attitudes and practices of major target groups are conducted before or at the beginning, and again towards the end or after a project or strategy.

Such before/after surveys of knowledge gains and attitude and practice changes are particularly good for monitoring and impact assessment of media, communication channels and learning aids employed in the context of EEC measures.

Therefore, KAP surveys – such as the pre-KAP in 2021 and the post-KAP in 2023 of the GIZ SPACES project or the KAP surveys commissioned by UNDP in 2019 – should be better coordinated and their results communicated more widely in order to align research methodologies for comparative purposes and facilitate the meaningfulness of results and conclusions. Such concerted efforts could best be coordinated by MET DPAM in the context of the EECS' Action Plan (see **Part 4**).

In case KAP surveys are not possible, less expensive and complex versions of M&E will often be sufficient. The most important thing is to think in advance how success will be noticed: How will you see, hear, or feel that you have reached your objectives? The second most important element is to define and assess this together with colleagues or at a workshop with stakeholder representatives as different people perceive and interpret things differently.

Through a chronological description and analysis of successful and less successful decisions made during planning, implementation and management of the EECS, certain generalizations could be suggested for future replications of similar PA-related EEC activities in Mongolia. As such, process documentation of critical issues and decision-making requirements should be started from the very beginning of the EECS.

4. Steps towards an EECS Action Plan

Based on the deliberations mentioned in **Part 3**, MET DPAM together with relevant stakeholders should draft an EECS Action Plan for the period 2022-2025. This will need consultations, best achieved by means of a related stakeholders workshop in late summer or early fall 2022. GIZ SPACES is prepared to organize and finance such a workshop and a subsequent online stakeholder exchange platform. The workshop and platform will provide a well-coordinated multi-stakeholder approach, the proceedings of which could be compiled in a consolidated Action Plan incorporating a time line, the media/learning aids/communication channels to be produced and used, the target groups to be reached, partners/producers/intermediaries involved, and budget and other resources needed.

The steps and elements outlined below may contribute to the realization of the envisioned Action Plan.

EEC Workshop, April 2022

GIZ SPACES conducted a 3-day EEC workshop for more than 50 participants working on EEC in PAs, NGOs, government, research and donor organizations together to discuss and explore creative ways of promoting and practicing EEC in Mongolia (see also **Part 3.6**). As a result of the workshop, participants

- reached a common understanding of EEC formats, training needs and tools,
- achieved a thorough grasp of the purpose, structure and contents of an EEC ToolBox and a MOVE Manual developed by GIZ SPACES,
- learned how to use the manuals for planning, implementing and scripting EEC events and related training workshops,
- were introduced to the concept of a National Environmental Campaign “My Green Mongolia” (or similar) based on EEC media and materials,
- established a Facebook Group “My Green Mongolia. EEC for a Sustainable Future” (<https://www.facebook.com/groups/eec4mygreenmongolia>).

A working group comprising Freshwater Center, Ecological Police, UNDP ENSURE, GIZ SPACES, ZSL, WWF, TNC, NNC, and the Khustai and KTT PAs discussed the concept of a national EEC campaign to reach out to all levels of public in an effective and efficient way (see **sub-chapter below**). The concept’s major principles are cooperation, exchange, and joined forces by all major players in EEC because this will safeguard leverage, outreach and cost-effectiveness: The group (of campaign contributors) will be more impactful than the sum of its individual organizations engaging in isolated and limited activities.

For the governance and management of the campaign, a board was recommended that comprises funding organizations, national NGOs and key government agencies, whose key role is to raise funds and manage them. Possibly, the para-statal Fresh Water Center can host the campaign’s secretariat and facilitate MET endorsement, and workshop space. The participating organizations made commitments to contribute to the campaign.

Workshop for PA Communication Officers, April 2022

GIZ SPACES also conducted a 2-day workshop for more than 30 PA communication officers in April 2022, who identified best-practice examples of successful communication activities in PAs and developed draft communication plans for three “virtual” protected areas in the “Northern”, “Gobi” and “Western Steppe” areas (see **Part 3.6**).

Online Stakeholder Exchange Platform

The planned website as an online stakeholder exchange platform should be set up in English and Mongolian, based on the assumption that it will not be ‘owned’ by GIZ or MET but by the newly established interest group “My Green Mongolia – EEC for a Sustainable Future”, which has also set up a Facebook Group by the same name. The initial budget for the development, design, hosting of the website will be taken over by GIZ SPACES, which will also take over the maintenance and updating costs until 4/2024, incl. a webmaster who will regularly update the website. Thereafter, these tasks and costs will have to be taken over by other members of the group. The website, once established as a stand-alone URL, should be designed in a way that it can be made an extra element of all websites owned and operated by members of the interest group. Its members can suggest new entries (e.g. for the Event Calendar, Media & Materials, etc.), which the webmaster will then upload to the website. The stakeholder exchange platform as a chat room will be open for registered members only. Possibly, this function could be outsourced to the existing Facebook Group by the same name. The online platform is recommended to have six nodes on the horizontal navigation bar: About Us – Activities – Exchange – Media & Materials – Research & Reports – Contacts and three vertical navigation levels.

National Environmental Media Campaign

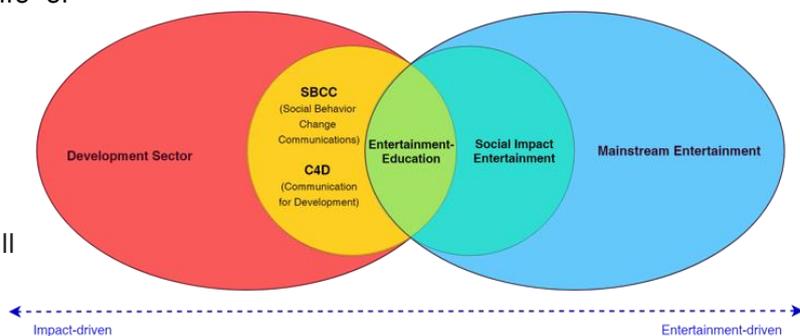
Concept

The above mentioned potential National Environmental Media Campaign, the corner stones of which were introduced and discussed in two stakeholder workshops in April 2022, integrates media and educational activities implemented or planned by a variety of government and NGO partners such as GIZ SPACES, UNDP ENSURE, WCS, WWF, TNC, etc. (see **sub-chapters above**). The concept’s major principles are cooperation, exchange, and joined forces by all major players in EEC because this will safeguard leverage, outreach and cost-effectiveness. Ultimately, these measures will share knowledge and change the attitudes and practices of the general public, visitors to protected areas, and experts in an environmentally friendly way. As such, a national environmental media campaign as a joined effort of government, donor and NGO partners will put the EECS into action.

The campaign framework has a number of strategic advantages as it will be

- creating an agreed-on nation-wide set of key environmental messages,
- aligning all partners’ communication work to create messages that are more consistent, clear, strategic and impactful,
- providing cost-saving opportunities in all phases, from design to M/E, incl. opportunities for incremental fundraising,
- increasing the promotion of Mongolia’s PAs,
- increasing overall environmental awareness in Mongolia,
- increasing political support to environmental issues in the country.

The campaign is planned to utilize an info- or edu-tainment approach. This is a communication strategy that aims to alleviate a social issue or inform and educate the public through custom-tailored facts and entertainment at the same time. It is defined by a set of techniques and methodologies which all aim to use various levels of mass media to communicate social and behavior change.



The campaign is also planned to use a transmedia strategy to deepen impact. Transmedia means to use a narrative that extends beyond multiple media forms that also plays to the strength of each format. For example, a radio drama will be produced for distribution through traditional radio stations and programs, while 2-3 min segments will also be distributed on social media. Comics, music videos or other media may use overlapping characters based on the same story lines, but in different situations for particular use on social media, at PAs or with schools and eco clubs.

Formative Research and Knowledge Management

As a KAP (Knowledge, Attitudes and Practices) survey and capacity needs assessments (CNA) among stakeholders have been undertaken in late 2021, respectively in early 2020 and 2022, much of the needed formative research is already available. Building upon this body of work and with input from partners, four key resources will inform and guide the overall implementation of the campaign.

Formative Research and Knowledge Management



An environmental message guide will provide a comprehensive set of technical guidance for all media productions. It will cover all relevant issues and be prepared by technical experts from GIZ, DPAM, UNDP, WWF, TNC, WCS and other strategic partners. The guide will build on the potential messages formulated as a result of the mentioned CNA and require no additional financing.

A values grid will also be prepared by the same technical working group. Based around the same technical issues as the message guide it will differ in that it looks at the “positive” and “negative” aspects of each environmental challenge and provide clear guidance for media producers on knowledge, attitude and practice change aspirations for each of the key target audiences.

A ToolBox (or “Treasure Trunk”) will be prepared prior to launch and will be maintained and added for the duration of the initiative. It will be a one-stop location for all partners to store and share valuable assets. Lesson plans and learning aids for educators and communicators in a variety of organizations, scripts for theatre productions, model posters and bill boards, and all media assets will be stored there. The ToolBox will be part of mentioned online stakeholder exchange platform. The EEC ToolBox of GIZ SPACES, the Nomadic Nature Trunk of NNC or the Environmental Cabinets of KfW BACCP do already exist and could become part of the “Treasure Trunk”. This will allow partners to access the work, and adapt it their particular needs, helping ensure maximum use of the media assets created as well as ensuring low-cost yet consistent implementation across the country.

The campaign management will also include a learning, monitoring and reporting framework. Designed in concert with key partners, this will allow for a cost-effective way of ensuring a robust learning program that

will allow for pre/post analysis of impact, but can also ensure learning and adaption throughout program delivery. As a pre-KAP survey and capacity needs assessments have already been undertaken by GIZ in 2020, 2021 and 2022, by MEC in 2021, and by UNDP in 2019, the basis of this framework is already in place.

Media Production and Outreach

The diagram below summarizes the key elements of the proposed national campaign. It highlights the key media assets to be produced. A consistent set of characters will be placed within all the productions to create a sense of familiarity and to enhance the entertainment value. Currently, GIZ SPACES is prepared to contribute more animated video clips, comics, and a 26-episode radio drama (12-15 minute episodes), possibly embedded in 1-hour radio magazine shows plus the adaption of the radio drama to a Podcast and online audio format distributed through social media. Based on potential commitments by other organizations such as UNDP ENSURE, WWF, WCS, TNC, etc. (see **Part 3.6**), training modules and workshops, school curricula, herder events, horse and camel campaigns, a Mobile Conservation Trunk, posters, and video could be added.

**Framework for a National Environmental Campaign
 The Big Picture**



This array of products will allow for a significant penetration across Mongolia through mass media and online distribution. Complementing this will be more targeted outreach interventions by relevant intermediaries such as herder organizations or buffer zone committees, PA officers and rangers, youth groups at Green Schools and eco-clubs, sustainability-oriented companies in the tourism sector as well as numerous partner campaigns, e.g. the endangered species initiatives by WWF, TNC, WCS, etc. These will reach critical target audience segments such as herders and pastoralists, PA administrations, school students, domestic PA visitors, etc. As organizations like UNDP, TNC, WWF and WCS are running successful environmental campaigns across Mongolia, the national framework will not discourage these efforts but rather encourage more collective action, deeper distribution, better message alignment and integrated M/E efforts.

Hence, the intention of the national campaign is **NOT** to stop or hinder other environmental campaigns. In fact, the intention is exactly the opposite – ideally it encourages more campaigns to run. However, the ideal is that these campaigns reinforce and build on the core messaging agreed upon through the preparation of the national campaign. There are opportunities to get parallel funding throughout this process. For example, a partner might fund additional episodes, co-fund the design workshop, or pay for broadcasting of the planned radio drama series as outlined below.

Next Steps towards the EECS Action Plan and the National Environmental Media Campaign

The next steps that should be taken up and/or are already planned in relation with the EECS Action Plan and the National Environmental Media Campaign can be summarized as outlined below:

- In 6/2022, GIZ SPACES will launch a biodiversity app and website.
- The STREAM component of GIZ SPACES is planning to finance the production of 1-2 animated videos and comics on sustainable forest management themes such as forest fires or pine nut harvesting in mid to late 2022.
- In 6-8/2022, a technical working group from among the members of the interest and Facebook Group “My Green Mongolia” (<https://www.facebook.com/groups/eec4mygreenmongolia>), headed by GIZ SPACES, will start developing the above mentioned environmental message guide, and values grid, and collect media and materials to be incorporated in the “Treasure Trunk”.
- A major stakeholder workshop to be organized by MET DPAM and financed by GIZ SPACES is planned for late summer or early fall 2022. During this event, commitments to the Action Plan from participating organizations could be formalized.
- As one of the results, an online stakeholder exchange platform will be set up and launched in 2022, financed by GIZ SPACES.
- A 5-day media production workshop for members of the “My Green Mongolia” interest group on message design, branding and producing a 26-episode radio drama series is planned for late summer or early fall 2022. This workshop will also be financed by GIZ SPACES. Subsequently, in 10-12/2022, the radio drama series will be produced.
- A soft launch of the radio drama series is envisioned for the end of 2022 while the half-year broadcasting of the series won’t start before 1/2023.