Federal Ministry
for Economic Cooperation
and Development

KFW

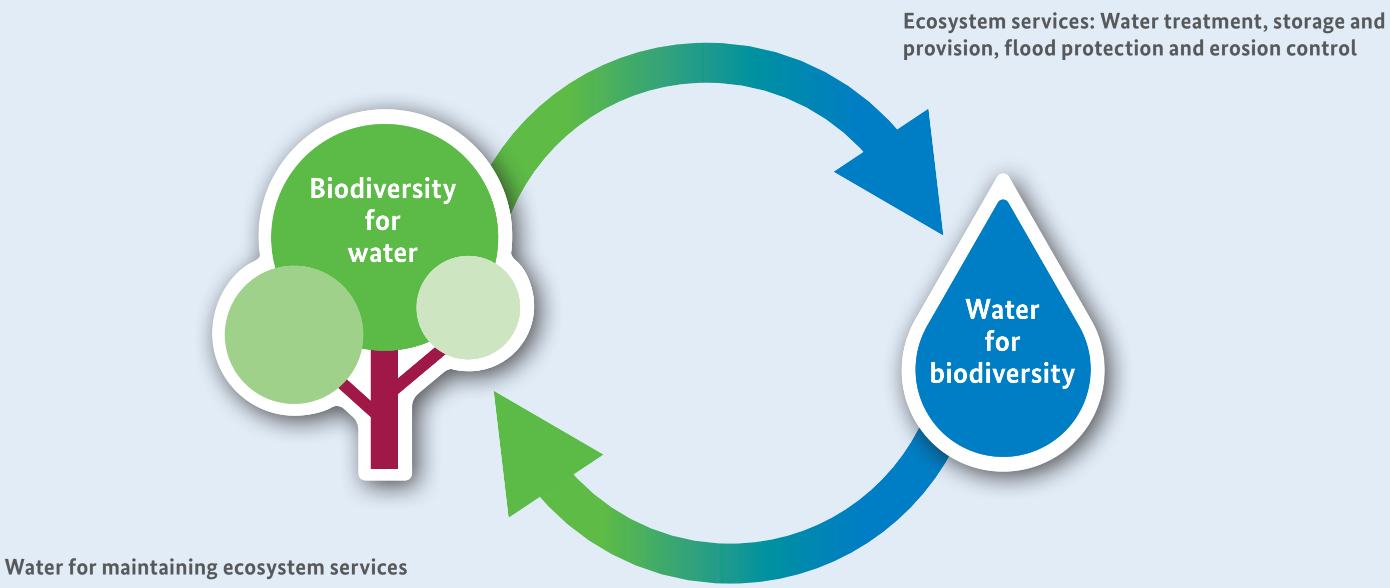
Published by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Guideline on integrating biodiversity into water and wastewater projects

The interface between biodiversity and water/wastewater

Water catchment areas, wetlands and inland waters are home to unique species and biotic communities. They also offer a multitude of ecosystem services, thereby delivering direct and indirect benefits for humankind: freshwater ecosystems play a key role in providing one of the most important basic needs, namely drinking water. Other ecosystem services include water treatment and storage, drought prevention, flood retention and erosion control.

However, only intact aquatic ecosystems can fully perform these services. Their biological diversity is essential for these ecosystems to be able to function. Biodiversity largely depends on the quality of water bodies, in other words on water quality and a water body structure that is as close to nature and diverse as possible. Biodiversity, water resources and ecosystem services thus interact with one another, as shown by the illustration below.



These interactions offer potential for synergies for certain projects in the water and wastewater sector. German development cooperation therefore generally adopts the approach of integrated water resources management (IWRM) – the integrated management of water resources and other resources while considering the protection and preservation of associated ecosystems. Wetland restoration, the creation of ecologically relevant retention areas, environmental protection measures for water collection areas, sustainable and ecologically driven reforestation, soil cultivation and farming methods that are sensitive to ecosystems as well as management plans to improve the ecological status of water bodies are tangible examples of how biodiversity is integrated into the water sector. The table in **Annex A** presents potential measures for integrating biodiversity; it does so in a more detailed and systematic manner, grouping the measures to the different types of technical and financial cooperation projects in the water sector.

The strategic importance of integration

An integrated approach to the water/wastewater and biodiversity fields of activity is not an end in itself**. It is a systematic component of the nexus approach supported by BMZ through water-energy-food.org.** There are a variety of benefits for both sides:

- An integrated approach to both fields of activity and the strengthening of cross-sector cooperation can make a significant contribution towards **better achieving** development and environmental policy **objectives in both areas.** For instance, the creation of forests rich in species in river basins (ecological objective) also benefits reliable drinking water supply (water sector objective).
- The inclusion of ecological functions and ecosystem services frequently also helps to operate infrastructure in a more environmentally sound and sustainable manner.
- The water and wastewater sector offers potential to contribute instruments for **leveraging and providing sustainable financing** for biodiversity, e.g. within the parameters of payments for ecosystem services (PES). Examples include water charges or separate levy funds ('water cents') that are also used for river basin management measures.
- Under certain conditions, water and wastewater projects can be counted towards the contributions that the German Government has committed to make towards the implementation of the Convention on Biological Diversity (CBD). To this end, they must directly and expressly support one of the three goals of the Convention on Biological Diversity as **sectoral components** (for a definition see Annex C): (1) conservation of biological diversity; (2) sustainable use of its components (ecosystems, species or genetic resources); or (3) fair and equitable sharing of benefits arising from their use.

Taking account of integration when designing and preparing for projects

A variety of approaches exist for promoting the integration of biodiversity into the preparation of water and wastewater projects:

1. Integrating biodiversity when designing projects

As a general rule, objectives, indicators and markers have not yet been determined at the start of project development work, for instance at the time of the brief assessment. It is a good idea to systematically investigate the potential for integrating biodiversity elements at this early stage of the project cycle. Key questions in this regard might be:

- Do the measures envisaged in the project interact with ecosystems? What positive and negative effects might the project have on ecosystems and vice versa? How can positive results be harnessed and negative results be minimised? (These questions are later explored in greater detail in the environment and climate assessment.)
- Do ecosystem services support the achievement of the objectives envisaged for the project? Are these ecosystem services stable or might they degrade? How would this affect project objectives during the term, but also as regards their long-term safeguarding? What opportunities exist to help to stabilise ecosystem services? Are these measures affordable as part of the project or might it be necessary to seek a partnership with other/complementary projects?
- Do water management concepts, framework planning, strategies, plans and legal frameworks give sufficient consideration to the protection and sustainable use of ecosystems? What can be done to ensure that sufficient attention is paid to this within the framework of the project?
- Are the partner and the target groups adequately aware of the importance of ecosystem functions? How can this be fostered, if necessary?
- Are there opportunities to derive economic benefits from the sustainable use of ecosystems and ecosystem services that might also be used for protection measures (*payment for ecosystem services*)?

2. Inclusion in the marker system and results model

BTR marker

A specific BMZ[1] guideline addresses the use of the BTR marker. It states that a measure should be classified as biodiversity-related (rated as a primary or secondary objective) if it makes a significant contribution to at least one of the three objectives of the CBD (see above). In practice, determining significance frequently poses a challenge. To provide assistance, Column 4 of **Annex A** contains key questions for different types of projects. Using the specific example of a wastewater project, **Annex D** also explains which markers appear justifiable under certain conditions and for certain types of projects.

As a rule, projects with biodiversity as a secondary objective are assigned the marker BTR-1. BTR-1 projects with a biodiversity-related sectoral component through CRS code 41030 have a specific CBD-related field of activity, which is specified with an indicator at module objective level. This sectoral component can be counted as a financial contribution towards the implementation of the CBD. **Annex B** lists examples of sectoral components in the water sector.

Results matrix objectives and indicators

Projects classified as BTR-1 without a biodiversity-related sectoral component can, but must not necessarily, have a biodiversity-related indicator. Conversely, projects with a sectoral component at module objective level must have at least one biodiversity-related indicator, as well as a corresponding objective at output level or a secondary objective at outcome level, generally speaking. As is the case for the BTR marker, the development of biodiversity-oriented objectives and indicators must be fleshed out and interpreted during the review process, and done so in a way that is related to the project. In particular, rigid 'standard indicators' would not be appropriate. Column (3) of the table in **Annex A** therefore lists for each type of project 'sample indicators' which have already been used in a variety of projects. In each instance, adaptation to the project under development as well as quality assurance with regard to the requirements applicable to that specific project must be carried out.

3. Assessment procedures (environment and climate assessment, environmental and social impact assessment, etc.)

The environment and climate assessment is a mandatory element when planning and implementing development strategies and measures and is governed by a corresponding guideline[2]. The aim of the environment and climate assessment is to ensure that, when planning and implementing strategies or measures, negative impacts on the environment and climate are avoided or reduced, (additional) potential for improving environmental quality and for avoiding greenhouse gases is harnessed in all sectors or programmes, and the impacts of climate change are considered and adaptation capacity increased. Biological diversity, ecosystems and ecosystem services are among the protected assets to be reviewed in the environmental and climate assessment. The findings of the environment and climate assessment are to be considered when designing measures.

Column 5 of **Annex A** lists key questions for the environment and climate assessment, broken down by project type, which serve as specific guidance on how to take account of aspects of biodiversity in water sector projects.

1 BMZ: Handbook of Bilateral Development Cooperation: Biodiversity Guide (Rio marker/BTR marker). Guideline no. HR056, 2015.

2 BMZ: Handbook of Bilateral Development Cooperation: Guideline for the Assessment and Consideration of Environmental and Climate Elements in Bilateral Governmental Development Cooperation. Guideline no. HR014, 2014.

Lessons learned

Based on the analyses of portfolios and projects, the following conclusions can be drawn about successfully integrating biodiversity into water and wastewater projects:

Holistic approaches

- Projects addressing the use of ecosystem services in the water sector (e.g. supplying water to the population and for agriculture, flood protection and the use of hydropower) should be combined with measures on overarching spatial planning and the sustainable management of water resources themselves, including the conservation of ecosystems. This includes integrated river basin management, preferably binding management and measure plans, the resolution of ongoing conflicts over water use, as well as the safeguarding and rehabilitation of critical ecosystems, such as wetlands, headwaters and forests.
- A holistic approach frequently requires a broader geographic area, e.g. considering the entire river basin or at least the catchment area where water is abstracted.
- Individual projects have had positive experiences in grouping the aforementioned conservation and management measures in a few pilot areas (preferably river basins that can be distinguished ecologically/ hydromorphologically and/or in terms of water resources) in order to create maximum synergies and counteract fragmentation into too many areas of cooperation.

Long-term orientation

- In particular the management of water catchment areas and the rehabilitation of ecosystems require a lot of patience. During its – limited – term, the project should create mechanisms fostering the long-term continuation of management approaches after the project ends.
- The preventative and early integration of biodiversity helps to avoid rehabilitation measures at a later date.

Raising the partner's awareness and willingness to cooperate

- The partners and target groups have limited awareness of and interest in the importance of integrating biodiversity. Long-term strategies combining planning/management, tangible pilot measures, capacity development, etc. often have to be pursued. Measures are generally most likely to be understood if they affect the specific reality of work and life of the partners and target groups and are beneficial for the pursuit of individual interests.
- Projects were successful if they were able to make it possible for people to grasp that ecologically driven, sustainable management makes economic sense, too. This applies in particular to agriculture and fishing. For instance, improvements in the functioning of ecosystems were able to stabilise fish yields and safeguard irrigation services.
- Overall, the overriding conceptual structures for integrating biodiversity are less interesting for partners and target groups than concrete milestones demonstrating real improvements. Upscaling allows a broad impact to be achieved as a result, too.

Cooperation networks between sectors, projects and institutions

- The holistic solutions needed often surpass the mandate and capabilities of an individual project. Therefore, projects have obtained good results if they foster complementary measures by partnering with other projects and through cross-sector and cross-institution cooperation networks. This is at the heart of the nexus approach. A few projects were thus able to successfully tap into additional financing, combined financing and follow-up financing and also unlock synergies.
- FC/TC cooperation was highly beneficial in a few areas, especially in strengthening the ties between infrastructure measures and capacity development/*good governance*.

Need for specification

- Projects repeatedly felt challenged by the fact that requirements for integration appeared to be too vague or too broad. Exchanging tangible and proven approaches was found to be very helpful. System complexity should be minimised during implementation.

Further information and support mechanisms

The sector programme entitled Implementing the Biodiversity Convention offers support mechanisms for members of appraisal missions. Moreover, an annotated bibliography is available containing documents from German development cooperation and international organisations on the interface between water/wastewater and biodiversity.

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List of abbreviations

BTR	Biodiversity marker (Rio marker)
CBD	Convention on Biological Diversity
CRS	Creditor Reporting System
FC	Financial cooperation
IWRM	Integrated water resources management
CC	Centers of competence
PES	Payment for ecosystem services
ECA	Environment and climate assessment
TC	Technical cooperation

Annex A: Fields of activity, sample indicators and key questions for the results matrix, markers and

(1) Project type	(2) Potential measures for integrating biodiversity elements	(3) Sample indicators to map biodiversity elements
Water policy (including water sector reform)	▪ Taking account of measures for the protection and sustainable use of ecosystems in water sector policies and strategies as well as in regulations. ▪ Supporting water sector reform programmes in ecologically sensitive regions (ecosystem services are at risk) through investment measures, e.g. to reduce losses in water extraction and distribution systems. ▪ Taking account of ecological requirements and opportunities in water use plans. ▪ Defining limit values for water quality and quantity to sustain ecosystem services. ▪ Combining a variety of water management measures, including as regards biodiversity and the sustainable use of ecosystem services.	▪ The extraction of water from aquifers in ecologically sensitive region x has decreased by y m^3 per annum. ▪ The decline in the water table in ecologically sensitive region x is curbed by y cm3/m3 per annum. ▪ The number of water permits taking account of ecological standards has increased. ▪ The ecological minimum water discharge identified for different sections of river is adhered to in at least x % of y measurement periods. ▪ The budget allocated to measures to conserve ecosystems that are important for the water supply has increased by y % compared with x.
Water supply	▪ Ecologically oriented protection or upgrading measures in the catchment area for the used water resources (ecologically driven reforestation, erosion control and reducing pollution). ▪ Conservation of water resources from sensitive ecosystems (e.g. through investment measures aimed at reducing loss or replacement with other water sources when using groundwater). ▪ Measures to reduce consumption through ecological methods (e.g. through organic farming). ▪ Inclusion of water supply in ecologically oriented integrated water resources management.	▪ x ha of forest (tree species y, z relevant to the ecosystem) have been created in the headwaters/ catchment area for water extraction. ▪ Water extraction from aquifers in ecologically sensitive region x has decreased by y m^3 per annum. ▪ Efficient irrigation systems using ecological functions (e.g. soil cover) have reduced the need for irrigation by x % per ha.
Management of wastewater and faeces	▪ Identifying locations for wastewater plants that will not have a negative impact on wetlands and other valuable ecosystems. ▪ Ecological opportunities arising from wastewater management that lead to a growth in biodiversity (e.g. through constructed wetlands). ▪ Wastewater management measures with a direct positive ecological benefit for waters and wetlands (e.g. RAMSAR sites or wetlands). ▪ Combination with support for the management of protected areas and/or wetlands. ▪ Productive sanitation systems integrating ecological elements[3].	▪ The number of animals of (fish) species x is stable in the river system connected to wastewater treatment. ▪ The 'good ecological status of water system x corresponds to the reference value in y. ▪ A protected area and wetland management plan has been adopted by partner institution x.

3 Productive sanitation is the term used for the variety of sanitation systems that make productive use of the nutrient, organic matter, water and energy content of human excreta and wastewater in agricultural production and aquaculture. These systems should enable the recovery of resources in household wastewater, minimise consumption and pollution of water resources, support the conservation of soil fertility as well as agricultural productivity and thereby contribute to food security and help to reduce malnutrition. (Source: http://www.susana.org/en/resources/library/details/101

assessments (e.g. environmental and climate assessment and feasibility studies)

(4) Key questions for awarding the BTR marker	(5) Key questions for the environment and climate assessment and feasibility studies
▪ Do the envisaged project measures interact with ecosystems? ▪ Are project measures at least partly geared towards the protection of ecosystems or to safeguarding ecosystem services in the long term? Is this impact significant?	▪ What positive and negative effects might the project have on ecosystems and vice versa? ▪ Is the achievement of the envisaged project objectives dependent on ecosystem services? Are these ecosystem services stable or might they degrade? ▪ What options for action are needed to protect ecosystems and to use ecosystem services in a sustainable manner? ▪ What changes are needed to existing water policies and regulations in this context? ▪ Are changes needed to other sector policies (e.g. agriculture, energy and land use)?
▪ Do the envisaged project measures interact with ecosystems or their services? ▪ Are project measures at least partly geared towards protecting or to rehabilitating ecosystems? Is this impact significant? ▪ Do project measures integrate ecological elements (e.g. during reforestation and erosion control)? ▪ Are opportunities for ecological upgrading used?	▪ What positive and negative effects might the project have on ecosystems and vice versa? ▪ Are ecosystem services which are fundamental to the project stable, already degraded or might they degrade in future? ▪ What measures are needed to protect ecosystems and to use ecosystem services in a sustainable manner? ▪ Are changes needed to other sector policies (e.g. agriculture and land use)? ▪ Do conservation measures in the catchment area have an ecological focus? How can their ecological focus be improved, if necessary?
▪ Does the project contribute towards the protection of species or habitats worth protecting? ▪ Are decentralised and near-natural treatment strategies pursued? ▪ Are measures to manage wetlands or other valuable ecosystems integrated into the project?	▪ What species, ecosystems or ecosystem services (e.g. drinking water sources) does the project interact with? ▪ How heavily polluted are ecosystems connected with the project or how great is the risk posed to species? ▪ What positive and negative results might the project have on relevant ecosystems? ▪ How can the project make a greater contribution to protecting species and ecosystems? ▪ What (accompanying) options for action to protect ecosystems appear necessary/sensible beyond simply treating water?

(1) Project type	(2) Potential measures for integrating biodiversity elements	(3) Sample indicators to map biodiversity elements
Water resources management **a) Transboundary water resources management**	■ Implementation of coordinated management plans for individual wetlands of international significance within the water catchment area. ■ Agreements with countries involved in water use, also taking ecological aspects into account. ■ Safeguarding ecological (transboundary) reviews of all relevant management and investment measures.	■ Measures to conserve biodiversity in wetlands from management plans agreed on by riparian states have been implemented in x transboundary (partial) water catchment areas. ■ Transboundary environmental impact assessments have been performed for all notified management and investment measures. ■ The ecological minimum water discharge identified for different sections of river is adhered to in at least x % of y measurement periods.
b) Climate-sensitive water management	■ Support for the renaturation of ecosystems in order to restore their original functions/services (e.g. restoring wetlands and flood plains). ■ Support for flood management through forest protection, reforestation and erosion control measures (using native species). ■ Preservation or restoration of biodiverse, resilient vegetation to protect embankments and coastlines. ■ Consideration of drought risks when undertaking agricultural measures relevant to water management.	■ Renaturation measures have been implemented in an area of y ha in river basin x. ■ y ha of environmentally relevant retention areas have been created in river basin x. ■ x agro-environmental measures to prevent damage caused by drought have been implemented in area y.
Water and agriculture/forestry	■ Support for measures for ecologically sustainable water use in irrigation farming. ■ Crop selection, including from the perspective of Selection of crops taking account of the aspect of their water storage capacity, erosion control and drought resistance. ■ Agroforestry measures to promote biodiversity. ■ Ecologically oriented reforestation and upgrading measures in critical water catchment areas.	■ x of z farmers use a system for *payment for ecosystem services* (PES) to compensate for the cost of switching to organic farming in water conservation areas. ■ Average soil loss caused by erosion on y t/ha/a of naturally managed agricultural land has been reduced by x %. ■ During reforestation measures, z % of the trees planted were from tree species y and z that are relevant for the ecosystem. ■ x out of y agricultural extension services provide advice on natural erosion control measures.
Sustainable hydropower	■ Supporting the undertaking of studies determining the ecological minimum discharge required in order to conserve biodiversity. ■ Ensuring the compatibility of reservoirs with (aquatic) ecosystems, for instance by regulating water levels and the degree to which fish are allowed to pass through. ■ Erosion control measures through ecological measures.	■ The ecological minimum water discharge is adhered to the operation of the (small-scale) hydropower plant x. ■ The reservoir's water level is kept within the ecologically required minimum and maximum levels during period x. ■ The critical fish species x is proven to be found above the reservoir, even y years after commissioning.

(4) Key questions for awarding the BTR marker	(5) Key questions for the environment and climate assessment and feasibility studies
■ Do the envisaged project measures interact with ecosystems? ■ Are project measures at least partly geared towards protecting ecosystems or to safeguarding ecosystem services in the long term? Is this impact significant?	■ What ecosystems in the river basin safeguard ecosystem services? ■ What condition are ecosystems in and how well are they expected to develop? ■ What measures are needed to protect ecosystems and to use ecosystem services in a sustainable manner? ■ What are the environmental risks posed by the intended uses and investment decisions? ■ What evaluation and management decisions are needed for these risks to be curbed?
■ Do the envisaged project measures interact with ecosystems? ■ Are project measures at least partly geared towards protecting ecosystems or to safeguarding ecosystem services in the long term? Is this impact significant?	■ Which ecosystems can carry out positive functions for flood or drought protection? ■ What condition are ecosystems in and how well are they expected to develop? ■ What measures are needed to protect or rehabilitate ecosystems? ■ Are changes to other sector policies (e.g. agriculture and land use) needed?
■ Do the envisaged project measures interact with ecosystems or their services? ■ Are project measures at least partly geared towards protecting or rehabilitating ecosystems or to safeguarding ecosystem services in the long term? Is this impact significant? ■ Do project measures integrate ecological elements (e.g. organic farming)?	■ Which ecosystems or ecosystem functions (e.g. erosion control) face a significant strain from agricultural and forestry practices? ■ What condition are ecosystems in and how well are they expected to develop? ■ What measures are needed to protect or rehabilitate ecosystems? ■ Do agricultural policies and practices need to be adjusted?
■ Do the envisaged project measures interact with ecosystems or their services? ■ Are project measures at least partly geared towards protecting or rehabilitating ecosystems? Is this impact significant?	■ How might species or ecosystems be compromised by the construction and operation of the reservoir? ■ Are these impairments serious? ■ What measures are needed to protect or rehabilitate ecosystems?

Annex B: Examples of sectoral and intersectoral components

- Promotion of the systematic **integration of the protection and sustainable use of biodiversity**, for instance by considering conservation areas, when revising **national water sector policies and strategies** as well as when reworking relevant **rules** and water framework planning, including as a foundation for one of the measures listed below.

- The **protection and integrated management of water catchment areas**, also within the broader framework of land use or spatial planning (nexus perspective), including strengthening competent organisations and institutions, insofar as this leads to a clear gain in biodiversity.

- The **creation of monitoring systems** at water sector institutions that specifically document parameters relevant to the biosystem (e.g. water levels and water flow at locations where biodiversity is sensitive) in order to also monitor implementation of measures relevant to ecosystems in water management plans.

- The creation of decision-making mechanisms for the **allocation of water and regulation of water resources** in cases where there are competing uses and when biodiversity-related demands exist.

- **Targeted advice** (e.g. via agricultural extension services) for all water users including companies from 'polluting sectors' (e.g. industry and large-scale extensive farming) on the importance of ecosystem services for water availability and quality and on measures for conserving biodiversity.

- Advice on and support for the general conditions for ***payment for ecosystem services*** agreements between users and providers of water-related ecosystem services, which may also include developing business models with water utilities or similar bodies to conserve wetlands or forests.

- The designation, creation and sustainable management of **conservation areas (e.g. forests or wetlands)** and/or of **groundwater and water conservation zones** (within the parameters of integrated land use planning or integrated water resources management) that contribute towards an **improvement in the quality and quantity of the local and regional water supply**.

- Support for **flood management** through **forest protection, reforestation and erosion control measures** (using native species), biological measures to **improve rainwater seepage**, conservation or renaturation of **natural flood plains and water reservoirs** (e.g. marshes or other wetlands) and through **embankment and coastline protection** by conserving and/or restoring biodiverse resilient vegetation.

- Promoting the **ecological opportunities offered by wastewater management** that lead to a growth in biodiversity (e.g. through constructed wetlands) and wastewater management measures with a direct positive benefit for waters and wetlands (e.g. RAMSAR sites or wetlands which are very important for the local drinking water supply) combined with support for the management of conservation areas and wetlands.

Annex C: Definitions

Sectoral component relevant to biodiversity	Clearly identifiable services and/or products in the programme proposal which support one of the three goals of the Convention on Biological Diversity (CBD), namely protection, sustainable use and benefit sharing, as their primary objective. Sectoral components have to have an indicator at outcome level (definition according to BMZ interface document).
Good ecological status	The status of a surface water in terms of its biological, hydromorphological and physico-chemical quality elements, for instance as defined in the EU Water Framework Directive.
Integrated water resources management (IWRM)	A process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare without compromising the sustainability of vital ecosystems (definition according to the *Global Water Partnership*).
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (definition according to the Convention on Biological Diversity).
Ecosystem services	Benefits which people obtain from ecosystems. These include provisioning services (e.g. food, water, building materials, etc.), regulating services (e.g. the control of the climate, flooding, land degradation, disease, etc.), supporting services (e.g. soil formation, nutrient recycling, etc.) as well as cultural services (e.g. recreation, spiritual and religious values, etc.) (definition according to the *Millennium Ecosystem Assessment*).
Payment for ecosystem services (PES)	Financial transactions between users and providers of water-related ecosystem services to create incentives for the continuous provision of ecosystem services.

Annex D: Case study on BTR classification

Brief description of the project

The FC programme entitled Protection of Source A within the water sector primarily pursues measures to collect and treat wastewater so as to protect the source system fed by groundwater, which includes source A, from pollution. The measure aims to safeguard the quality of the groundwater feeding source A and thus the provision of safe drinking water to the capital, which is 30 km away. The source system represents the main source of drinking water to the capital.

The options for measures under discussion include the creation of a wastewater collection network and a sewage treatment plant with different options in town B (30,000 residents), measures to improve the abstraction of water at source A itself, a variety of measures to stem sources of pollution (illegal dumps, unmaintained faecal tanks, cesspits, faecal sludge deposits, etc.) as well as protection and renaturation measures in the source area. The source system is particularly vulnerable to pollution because of the hydrogeological condition of the permeable karst rock. The new sewage treatment plant is to drain into river C, which traverses the source system and is in hydrological interaction with it.

Awarding the BTR marker

A variety of options for actions and project versions are considered for the project. These would lead to varying BTR markers, depending on their design:

Project orientation and options for measures to be integrated	BTR marker	Rationale
Central wastewater collection in town B combined with a three-stage conventional treatment plant with discharge into river C.	BTR-0	The measures are desirable from a water management standpoint, but have no significant link to biodiversity.
Integration of the project into IWRM in the source area with different measures to safeguard water provision and to improve efficiency of use.	BTR-0	The measures help to stabilise the ecosystem service of water provision on the whole, but do not lead to the protection or upgrading of ecosystems.
Connection of central wastewater disposal with a variety of technical measures to reduce water and soil pollution.	BTR-0	The measures are desirable with regards to the project objective and can also lead to certain improvements in biodiversity, but are not significant in this regard.
Connection of wastewater treatment with a variety of renaturation and reforestation measures with tree species relevant for biodiversity in the source area.	BTR-1	The ecosystem in the source area is upgraded on the whole and ecosystem services are safeguarded through ecologically relevant measures.
Instead of a central sewage treatment plant, decentralised wastewater and faeces management are pursued, which leads to a growth in biodiversity (e.g. through constructed wetlands).	BTR-1	The growth in biodiversity has significance for biodiversity.
Assumption: The sewage treatment plant's discharge point is located close to an aquatic conservation system or a priority ecosystem.	BTR-1	The improvement in water quality leads to a direct improvement in biodiversity in the connected ecosystem.

The options for measures and BTR classifications should be taken as examples. In any event, the assignment of the marker requires an appraisal of that specific case.

Published by:

Publisher
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

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Design
MediaCompany – Agentur für Kommunikation GmbH

Fotos
GIZ; GIZ; GIZ/ Axthelm; Aichi Icons © BIP/SCBD

Place and date of publication
Eschborn, October 2016

Commissioned by
German Federal Ministry for Economic Cooperation and Development (BMZ)

Division
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GIZ is responsible for the content of this publication.