



WATER, SANITATION & WASTE MANAGEMENT

WATER FOR LIFE
PROMOTING SANITATION AND HYGIENE
RESOURCES AND WASTE MANAGEMENT



WATER FOR LIFE



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CHALLENGES

Population growth and urbanization in developing countries result in a higher demand for water aggravated by spreading low-income areas and informal settlements in urban and peri-urban zones. Water sector institutions and service providers in particular are often not prepared to cope with the rising management and investment challenges. Many public service providers face operational inefficiencies and lack commercial orientation. While access to safe drinking water in sufficient quantity is a human right, the management of the water supply system should be based on commercial principles in order to attain sustainability. This challenge requires the development of appropriate legal and regulatory frameworks, as well as technical, financial and institutional models for target-oriented urban and rural water sector development.

GFA APPROACH AND SERVICES

GFA's approach to water sector development is geared towards entrepreneurial thinking in the management of economically feasible water supply. Autonomy, transparency and accountability are prerequisites for any successful cooperation and for improved public service provision. Commercialization and private sector participation as well as pro-poor orientation need to be initiated and enhanced towards this end. GFA's concepts are tailor-made and based on the needs of the local population.

MANAGEMENT AND (RE-)ORGANIZATION

Institutional structures and the legal framework of the water sector as well as service provision need to be enhanced. Successful pro-poor water sector

reforms establish legal and institutional frameworks based on equitable and sustainable access to water supply and sanitation. GFA assists public utilities and local governments to restructure and implement modern management and operational procedures that increase overall performance. This includes the implementation of up-to-date software packages.

FINANCIAL AND COMMERCIAL OPERATION

Sustainability relies on affordable services and cost recovery. Successful reforms achieve this goal by establishing systems that generate economies of scale, introducing management systems with rising performance levels and implementing cost-covering, pro-poor tariff systems. To this end, GFA draws on its own software solutions for accounting, controlling, billing and revenue management. These software solutions can be adapted to specific project needs offering tailored, highly flexible results.

FINANCING MECHANISM

Funding in the water sector remains too low and is often not oriented towards pro-poor last mile infrastructure. In addition, last mile infrastructure is often based on poor managerial and technical concepts. Establishing independent financing institutions such as trust funds can be a solution. Such a financing mechanism can obtain funds from government and donors to support the extension and improvement of services to low-income areas. Through transparent competition, funding is provided to water utilities. By means of capacity development and technical and managerial standardization for planning, implementing and operating the facilities, GFA supports trust funds in improving their services to low-income urban areas.

ACCOMPANYING MEASURES

Continuous information, education and communication (IEC) are fundamental for overall program success. Hence, GFA specializes in the design and implementation of KAP (knowledge-attitude-practice) surveys and IEC campaigns related to water, health and hygiene. The collection of socio-economic baseline data on target populations, particularly the urban poor, is one of GFA's core competencies.

ADAPTED URBAN WATER SUPPLY CONCEPTS

GFA develops adapted water supply concepts for low-income and poor urban areas in cooperation with local service providers and sector institutions. The concepts are based on extensive experience in planning, designing, implementing, managing, and monitoring water kiosk programs.

PROMOTING SANITATION AND HYGIENE



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CHALLENGES

In many developing countries appropriate sanitation infrastructure is either non-existent or is failing to cope with rapid population growth. Additionally, inadequate hygiene awareness results in severe health problems and environmental hazards. Access to sanitation is a human right that safeguards health and human dignity. Every person deserves to be protected from problems caused by poor disposal of excreta. Unless immediate action is taken, the number of people without adequate sanitation will rise to more than 4.5 billion in just 20 years. Hardest hit will be the poor living in densely populated urban areas.

GFA APPROACH AND SERVICES

GFA's approach to sanitation is holistic and characterized by adherence to sustainability aspects, paying attention to users' preferences and the services they want and for which they are willing to pay. GFA puts household at the centre and includes hygiene and sanitation promotion as well as social marketing. Sanitation systems have to be economically viable, socially acceptable and technically and institutionally appropriate to ensure that they protect both human health and the environment.

SUPPORT TO SEWERAGE UTILITIES

The organizational and managerial development of public sewerage utilities is necessary to foster a response to changing demand. Under this condition only, public sanitation infrastructure can be operated and maintained efficiently in low and lower-middle income countries. GFA supports service providers

in improving service provision by considering functionality, asset ownership, finances and operations as well as regional clustering in order to benefit from economies of scale. Management systems that address effective operations and customer services serve as a basis of tailor-made and needs-based training and support programs.

UPSCALING BASIC SANITATION FOR THE URBAN POOR

Due to a lack of investment within the sector, a large and growing number of people live in urban low-income areas without access to affordable and adequate sanitation services. In addition, current policies and legal frameworks of utilities and politicians do not sufficiently focus on low-cost solutions and low-income areas. GFA supports sector stakeholders to implement a comprehensive scaling-up approach for sustainable access to sanitation services. Therefore, GFA emphasis is on strengthening the sector framework by supporting the establishment of financing mechanisms and national standards. This will improve service quality and quantity as well as transparency. In collaboration with the utilities, information systems are completed to provide a baseline for effective management decisions.

The development of realistic and affordable last mile infrastructure toolkits such as decentralised wastewater treatment facilities or household and public toilets complement first mile infrastructure. This way, sustainable sanitation services are provided to low-income areas within a reasonable time frame and in a cost-efficient manner.



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RESOURCES AND WASTE MANAGEMENT



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CHALLENGES

Solid waste management (SWM) is a growing challenge worldwide, especially in developing countries as a result of the rapid increase in waste generation caused by increasing population levels, booming economies and rapid urbanization and industrialization. Authorities for urban waste management are tasked to provide effective and efficient waste management systems for residents in their cities. However, they often face problems beyond their capabilities, which mainly has to do with the systems' complex and multi-dimensional nature, and the lack of financial, human, infrastructural, and related resources to develop effective SWM systems. At a global scale, the generation of waste has doubled over the last two decades and the majority of it is still landfilled or incinerated, causing direct greenhouse gas (GHG) emissions. Nowadays, concerns about inappropriate management have led to efforts to reorient and upgrade SWM systems so that sustainability can be achieved.

GFA APPROACH AND SERVICES

Sustainable resource utilization and SWM are global challenges. From state-of-the-art technologies for recovering resources to practices that make landfills less harmful to human health and the environment, GFA's in-depth experience with both public and private sector clients worldwide makes for a thorough understanding of problem-oriented solutions across a wide range of contexts. The GFA approach aims at providing innovative tools and approaches to the

governance and implementation of integrated waste management. The company provides technical, financial and strategic expertise to SWM stakeholders at different levels. This contributes to the improvement of waste management services and the integration into a circular economy.

GFA services seek to improve the human, institutional and administrative capacities of relevant local, regional and national administrations for the implementation of integrated and job-creating SWM. This includes the development and implementation of communication and awareness-raising strategies, pragmatic recycling solutions, strategies regarding the increase of waste recovery rates, and the integration of the circular economy.

In its work, GFA strives to facilitate close cooperation and interaction between different actors such as civil society, the private sector and specialist scientists. Putting an emphasis on holistic designs in all its services, GFA has anchored a climate change focus in its organizational structure through the Climate and Energy Cluster and its attached inter-departmental technical working groups.

For a successful and sustainable SWM system, a combination of modern technologies and local expertise is required. To this end, GFA promotes waste prevention and reduction, and waste separation as preferred practices in designing and implementing sustainable SWM systems. Beyond its technical know-how, GFA fosters a multitude of key services needed to safeguard a successful outcome, which include but are not limited to:

ASSISTING STRATEGIC WASTE MANAGEMENT PLANNING AND FOLLOW-UP IMPLEMENTATION

In order to use limited resources most effectively, GFA assists the design of SWM plans at national, regional and local levels, and provides support to follow up on their implementation, e.g. solid waste plans for different municipalities in Albania.

LEGAL AND INSTITUTIONAL ASPECT

GFA assists national and local governments in upgrading and implementing new policies, strategies, regulations and legal frameworks for efficient SWM practices.

DEVELOPING FINANCING SCHEMES

GFA supports relevant authorities to transform their SWM systems to more self-financing programs and to develop measures that reduce and recover expenditures while increasing revenues.



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AWARENESS RAISING

Communication, education and public awareness (CEPA) and community participation are key elements in waste management and form a crucial part of any successful integrated SWM strategy. With our longstanding experience in CEPA actions, GFA supports sustainable behavior change, which is the only way to establish integrated SWM practices that e.g. include separation at source.

HUMAN RESOURCES AND HUMAN CAPACITY DEVELOPMENT

As continuously strengthening human resources is key to successful sustainable SWM, GFA fosters in-house capacities and skills with waste management institutions.

WASTE AND CIRCULAR ECONOMY

Circular economy consider the limitations on natural resources by recycling and resource efficiency. The circular economy concept involves a systemic change away from linear economies that are built on take-make-waste principles. By involving innovation and technology systems, but also policies, society, business models and finance, GFA develops adapted circular economy concepts and strategies for developing countries in cooperation with local governments and waste sector institutions.

GFA assists the latter in setting up and implementing new business models, and in creating value for the circular economy. The company’s vast expertise in inter-connected sectors provides for the technical knowledge and holistic view required to guide and intervene with private and public organizations, helping them face the challenges involved in the transition from a linear to a circular economy. In this respect, GFA has developed a vision to address all the levers of a circular economy, whether at the product or territorial level.

LINEAR ECONOMY



CIRCULAR ECONOMY



For more information on the company’s **circular economy** approach and services, **download our factsheet (PDF)**.

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