

# **Environmental Engineering**

# and Management

Your Sustainability Partner





Info@dairasabz.com www.dairasabz.com

# 3. Environmental Engineering and Management

#### 3.1 Environmental Governance

As part of the evidence pillar, consultancy our services include the assessment of actual environmental and ecological monitoring systems as well as specifying improvements and facilitating their implementation. Advising on environmental information systems and using them to assess the impacts of policy



implementation is an equally important task.

DS, as a leading consultancy, is assisting ministries, regional bodies, and municipalities to strengthen Afghanistan's environmental governance. DS aims at promoting and supporting a sustainable framework governance appropriate to the concerned country's traditions while taking into account related international standards and the legitimate interests and requirements of sectoral stakeholders and the public.



DS experts provide advice on available policy options and analyze and discuss the development of policy measures and standards with our





Info@dairasabz.com www.dairasabz.com

partners. They draft suitable legislation and implementing regulations where needed and requested. Institutional capacity building is an integral part of our work. We assess priority training needs and provide targeted training as well as on-the-job assistance and support. Likewise, we help in the implementation of related measures and support awareness-raising activities and outreach programs.

# **3.2 Corporate Environmental Services**

The DS provides the following services according to the international standards and national rules and regulations:

2

- >Initial Environmental Examination (IEE)
- ≻Environmental & Social Management
- System Design & Implementation
- >Environmental Management Plan (EMP)
- ≻Resettlement Action Plan (RAP)
- ≻Planning, Regulatory Support, and Compliance
- ≻Environmental Auditing
- ≻Greenhouse Gases Inventory
- ≻Flora and Fauna Baseline Survey
- ≻Socio-economic Baseline Survey
- >Environmental Impact Assessment (EIA)
- >Environmental Social Impact Assessment (ESIA)



Your Sustainability Partner





Info@dairasabz.com www.dairasabz.com

#### 3.2.1 Environmental & Social Impact Assessment

DS provides a full range of EIA and ESIA services to clients across all our business sectors and throughout all our operating areas. DS provides a diverse range of services to assist clients who need to undertake an Environmental Impact Assessment (EIA) in support of a development, specific or Environmental Social **Environmental Assessment** (ESIA) of a larger scale concept or planning policy.

The level of support DS can offer ranges from individual technical sections through to complete management of the EIA/ ESIA and the associated planning process.

Environmental Impact Assessment (EIA) is a process used to assess the environmental and socio-economic consequences (which can be positive as well as negative) of a project and provides information to decision makers and stakeholders prior to deciding whether or not to permit a project.

3

How can DS help?

• DS provides pragmatic reviews of EIA work to regulators and other interested parties. DS's EIA/ESIA clients tend to be





(+93) 700 025 021

Info@dairasabz.com www.dairasabz.com

governmental and regulatory bodies that wish to assess the impacts of their policy-making guidance and decisions.

- DS can manage and deliver an entire EIA project from concept, pre-feasibility through to feasibility using experienced EIA project managers and its teams of technical specialists; or our technical experts can provide input on one or more discrete EIA topics. We also have key staff that are able to provide technical peer review as may be required for the more contentious projects to ensure that the assessment is robust and thorough.
- Full EIAs or free-standing technical reports from in-house experts.
- Many technical disciplines also have expert witness experience complex and contentious that can assist on more developments.
- Providing planning and environmental support for a range of development schemes.

# **3.3 Disaster Risk Reduction and Management**

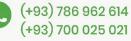
Poor people living in low and middle-income countries have paid a disproportionate price in terms of human suffering of disasters. We are sustain working to the institutions and build resilient communities. We are working to reduce the risks and provide services for management to understand



risk and vulnerability, prevent a hazard from becoming a disaster, and mitigate its impact by making people more resilient.







Info@dairasabz.com www.dairasabz.com

Our DRRM related services include:

- Community-based disaster risk reduction/management
- Disaster risk and vulnerability assessment
- Disaster risk mapping and GIS applications
- National and sub-national planning for disaster risk reduction;
- Integrated drought risk assessment, planning and management.
- Integrated flood risk assessment, planning and management.
- Capacity and vulnerability assessment
- Capacity development



















Info@dairasabz.com www.dairasabz.com

#### 3.4 Waste Management

Waste avoidance, recovery and re-use in communities and industries together with efficient waste management, are critical elements of sustainable development. DS Consulting is a leading provider of environmental consultancy services to the waste sector, providing advice to a range of clients including waste producers, the waste management industry, its regulators and investors.







Info@dairasabz.com www.dairasabz.com

The waste management philosophy developed by DS follows an established waste hierarchy of waste prevention, minimization, reuse or recycling up to the possible extent, energy recovery and final disposal. The DS team provides practical advice on all waste types, including municipal, household, commercial, industrial, hazardous, agricultural, and, mining waste.

DS's comprehensive range of waste management services, from planning and design to monitoring and project management, helps our clients deliver and operate essential waste management facilities, while also returning long-term benefits to communities and the environment, all of which is done through our team of waste management professionals.

Some of our areas of expertise are:

- Waste management plans for all types of establishments and industries;
- Development and review of waste policy and regulations;
- Strategic planning for new waste facilities, encompassing business case development, options assessment and siting studies, and impact assessment;
- Design and documentation for recycling and waste disposal facilities, such as transfer stations, resource recovery centers, landfills, materials recovery facilities;
- Design of waste processing facilities, including organic wastes, mixed solid waste and energy from waste facilities and other alternative waste technologies (AWT);
- Specialist engineering advice on issues such as landfill gas, leachate, landfill capping systems and liners;
- Operational support including operational management plans, environmental advice;

- Solid waste planning and management;
- Researching and auditing disposal sites;





- Preparation of fire and safety plans, waste drum control, spill control, and contingency plans;
- Waste management personnel training;

## 3.5 Environmental Engineering

Our environmental engineers develop solutions to the world's environmental issues. We offer and professional engineering surveying services throughout Afghanistan and the region for industrial. commercial real estate, government, and other types of projects. We also provide construction administration and advice services for a diverse portfolio of civil and environmental construction projects.



We design equipment to perform to the highest standards of water and air pollution control, and wastewater. Our Environmental engineers conduct waste management studies in which we evaluate the significance of the hazard, offer analysis on treatment and develop regulations to prevent accidents. We design municipal water supply and industrial wastewater treatment systems. We also conduct research on proposed environmental projects, analyze scientific data, and perform quality control checks. Our Environmental Engineering Services:

- Environmental Engineering Design & Engineering Services
- Design and installation of air pollution abatement equipment
- Design of water treatment processes
- Evaluation of air pollution and water pollution technologies
- Process selection studies and economic evaluation
- Compliance with all environmental protection regulations







(+93) 700 025 021

Info@dairasabz.com www.dairasabz.com

- **Environmental Remediation** •
- **Professional Land Surveying Services** •
- **Civil and Environmental Construction Administration** •

- Design of Water and wastewater treatment system •
- Hydrogeological Studies •
- Landfill Engineering Design Services •





Info@dairasabz.com www.dairasabz.com

### 3.6 Urban Development

We are working together with our clients to tackle the challenges affecting economic growth to create vibrant, sustainable cities, towns and communities where people want to live, work, and play. We know that competitive cities draw talented people, attract investment, foster new businesses, provide jobs and create fresh social and economic opportunities for everyone. From master planning a new "smart" city to revitalizing the core infrastructures of historic capitals, we are dedicated to imagining and delivering innovative, yet practical solutions for urban challenges.

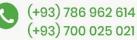


Our urban development services include:

- Program planning, management, and delivery
- Master planning and urban design
- Mapping and digitizing the cities
- Site selection and land planning
- Project development and structuring



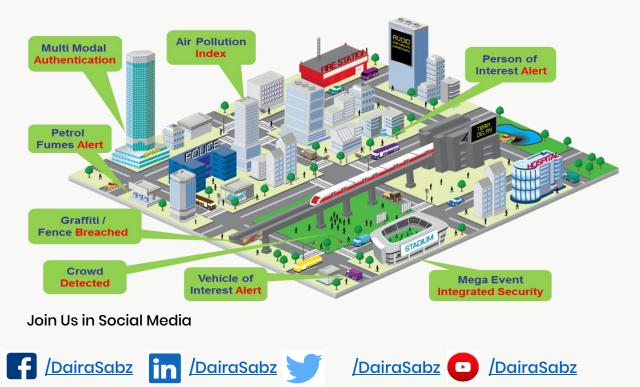




(+93) 700 025 021

Info@dairasabz.com www.dairasabz.com

- Lean design and integrated architectural-engineering design
- Procurement planning and green supply chain development
- Urban transport systems development and optimization
- Road and utilities infrastructure design
- Sustainability assessment and rating systems (smart cities)
- Economic development (core jobs) planning and implementation
- Urban development planning and reviewing strategies
- Assessment of commercial and industrial zones
- Designing transportation and smart cities
- Preparing the land use management plan
- Construction management and design-build
- Green Walls and 3R Concept
- Eco-friendly construction design services



Please consider the environment before printing the brochure. We are committed to environmental conservation; thus, not printing this brochure.