SEA Pilot project in Georgia "SEA for the National Waste Management Strategy (2015-2030) and Action Plan (2015 – 2020)"

Main finding of SEA Scoping

22 September 2015

Tbilisi

Scoping Process

The SEA Scoping for Waste Management Strategy and Action Plan entails several activities, namely:

- Preliminary analysis of the environmental situation (baseline analysis);
- Identification of environmental (and health) policy objectives relevant to the Strategy;
- Identification of the key environmental (and public health) issues relevant to the Strategy; and
- Consultations with stakeholders.

Scoping Process

- Selection of SEA team experts (water, soil, air, climate, biodiversity, public health, protected areas, social-economical aspects, waste, geological hazards and mineral resources)
- Initial scoping workshop;
- Preparation of individual scoping reports;
- Compiling the draft scoping report;
- Introduce draft scoping report to stakeholder for discussion and comments.

Key issues

Air and climate

- Air is polluted in most big cities of Georgia, concentration of priority pollutants exceed allowable limits;
- Air monitoring does not meet international standards related to number of stations, their location, data gathering, storing and processing;
- Landfills do not have system of collection and removal of combustible landfill gasses;
- Waste can self-ignite resulting at a fire, which is difficult to control, resulting in emissions of very hazardous pollutants, dioxins and furans.

Key issues

Air and climate

- There is a huge potential for methane emissions reduction if gas collection systems are installed in landfills;
- The collected gas can be used as energy source to generate electricity and/or heat;
- Harmonization of air protection legislation with EU legislation.

Key issues and findings

Biodiversity and protected areas

- High level of contamination of ecosystems;
- Legislative gaps in the waste management;
- Lack of information and data;
- Low public awareness with regard to pollution;
- Lack of waste collection facilities;
- Absence of waste collection system;

Key issues

Biodiversity and protected areas

- Absence of waste removal system from protected areas;
- Lack of waste treatment objectives on protected areas in the strategic policy documents;
- Increased risks of fire;
- Loss of flora and fauna species.

Key issues

Geology and Mineral Resource

- Negative Environmental and Health Impacts from Geological Hazards (Landslide, Debrisflow/Mudflow, Riverbank erosion etc.);
  •Ensure effective management measures in order to prevent and mitigate the possible negative consequences of Geological disasters (monitoring, preparedness and timely warning-informing the public);
  •Determine the location, type, and scale of the expected phenomenon, as well as the estimated impact of such an event on the population and infrastructure to reduce the negative consequences of natural disasters;

Key issues

Geology and Mineral Resources

- Lack of data of Groundwater (Quantity and Quality);
- Lack of Data of abandoned Mineral resources sites;
- Lack of Engineering-Geological and Hydrogeological assessment of territory for residual waste materials.

Key issues

Water and soil

- The Negative Environmental and Health Impacts from landfills;
- Low awareness and common understanding of the benefits of the SEA at national and local levels;
- Number of areas where there is insufficient data or where the level of detail is not sufficient;
- Lack of Biological water quality data;
- Insufficient data on soil quality;
- Lack of data on groundwater quality;

Key issues

Water and soil

- No statistic data in direction of water availability as a result of climate changes, with a particular risk of seasonal drought, which may affect water availability for use in waste management;
- Absence of the effective integrated water management systems;
- Water pollution incidents from the waste sector - this is still an issue;
- Absence/Lack of the River basin management plans;

Key issues

Water and Soil

- Absence of the Water quality monitoring programs in accordance to EU water framework directive.
- Absence of the topographic mapping on identification of sensitive water bodies(urban waste water discharge) – in Compliance with the urban waste water directive, Annex2, Article5;
- Absence of the Closed(abandoned) mining waste facilities Inventory etc.

Key issues

Water and soil

- Conceptual framework for considering environmental and health issues in tandem;
- Development of environmental and health-impact assessment policies;
- Improve legislative and institutional framework to fully comply with the relevant EU legislation;
- There is the challenge of lack of or inadequate information and or data, leading to inadequate knowledge. Without knowledge and information or data, public awareness will be lacking or inadequate, further causing people not to be well informed, hence, they cannot participate in decision-making and decision-making will not be proper;
- The challenge of institutional framework;
- EU Water framework directive Compliance Monitoring.

Key issues

Socio-economic factors

- The average annual revenue from cleaning fee is very low and insufficient for waste management;
- Accumulated cleaning fees are much lower than cleaning accrued revenue;
- It is not exists the policy for cleaning fee;
- Absence of socio-economic policy for the waste;
- Absence of the research on affordability of waste fees for the population.

Key issues

Public Health

- According to the WHO estimates *17%* of the overall disease burden and *19%* of all deaths in Georgia are attributable to environmental risk factors.
- Environmental disease burden in DALYs and deaths in Georgia are higher as compared to developed countries, although Georgia is least impacted than other post-soviet and developing countries
- In Georgia, in children under 5 years of age 14% of mortality and 30% of overall disease burden is attributable to modifiable environmental risk factors

Key issues

Public Health

- Contaminated leachate and surface runoff from land disposal facilities affecting down gradient ground and surface water quality;
- Methane and carbon dioxide air emissions from land disposal facilities adding to global warming, and subsequently vector-borne disease abundance and pathogen survival;
- Volatile organic compounds in air emissions and inconclusive evidence on altered cancer incidence, birth defects, and infant mortality, as well as psychological stress for those living near solid waste incinerators or inadequately controlled land disposal facilities;
- Animals feeding on solid waste providing a food chain path for transmitting animal and human diseases;
- Uncollected wastes retaining water and clogged drains, thus leading to stagnant waters which encourage mosquito vector abundance;
- Uncollected wastes providing food and breeding sites for insect, bird and rodent disease vectors.

Key issues

Public Health

- Lack of reliable, clear, timely and systematic environmental monitoring data in order to identify potential risks to Public Health;
- Lack of national survey reports, analysis, scientific researches detecting potential environment and health correlation for the formulation environmental and health care actions and policy;
- Absence of consistent and rational approach to human biomonitoring (HBM) as a complementary tool for evidence based public and environmental health measures;
- Lack of national regulations and guidance manuals, promoted by certification and inspection programmes for the sound management of occupational health and safety;
- Lack of coordination and collaboration mechanisms between environmental and health sectors for the supporting decision making process in Environmental Health field.

Key issues

Waste

- Institutional:

1. Weak coordination between the state institutions involved at different stages or different types waste management process;
2. Lack of national regulations normative acts and standards;

- Resources:

1. Human resources: Lack of State educational programs in waste management field;
2. Infrastructural resources: (1) Absence of hazardous waste landfill; (2) the vast majority of municipal waste landfills does not meet the legal requirements.

- Management Systems:

1.With few exceptions the waste management system used in the country is: waste collection, transportation and disposal.

Initial Recommendations

- Development and implementation of Waste Minimization Plans and measures;
- Banning of illegal dumping especially in rural areas;
- Ensure waste separation system;
- Development and implementation of Waste Awareness and Education Plans;
- Measures for preventing pollution of soil, surface and ground waters from landfills by imposing the requirement to apply Best Available technologies;
- Establishment of emission collection systems at landfills;
- Development and implementation of Waste Information Management System for improving waste data collection and reporting;
- Ensure waste collection and removal measures in municipal waste management plans for protected areas;
- Considering potential geological risks and hazards when selecting sites for waste management infrastructure;

Initial Recommendations

- Measures for eradicating old spots of industrial waste and pesticides stocks;
- Preparation of closure Plans for those illegal dumps and operational dumpsites that are subject to closure;
- Development of the monitoring system for landfills in harmonization with EU legislation;
- Identification and cleanup of abandoned mining sites;
- Considering improvement of the groundwater monitoring system;
- Development of EU Water framework directive compliance monitoring;
- Improvement of the Geological Hazards (Landslide, Debrisflow etc.) monitoring system;
- Use of waste as an energy source;
- Development of an effective tariff collection system for waste;

Initial Recommendations

- Ensure environmental health monitoring, data collection and analysis;
- Minimize the risks to human health from environmental hazards especially in children;
- Developing a consistent and rational approach to human biomonitoring (HBM)
- Increase awareness in various groups of population (decision makers, industry, public, and media) to environmental issues, occupational health and safety issues, waste minimization opportunities and the values recycling and resource recovery.
- Improving environmental and hygiene issues around solid waste collection and disposal by development Public-Private Partnership (PPP) approach;
- Calculate funds needed (according to the general policy);

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Questions/suggestions/recommendations