



A Glance at the World

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This column comprises notes and info not subjected to peer-review focusing on waste management issues in different corners of the world. Its aim is to open a window onto the solid waste management situation in any given country, major city or significant geographic area that may be of interest to the scientific and technical community.

Waste management in Romania

Preserving natural resources through recycling and reusing of waste requires to consider it as a real resource.

In Romania, the main objectives in the field of waste recycling are in accordance with the National Waste Management Strategy (SNGD), as follows:

- Focused efforts on waste management under incidence of the waste hierarchy criterion.
- Developing measures to encourage waste reduction and reuse, promoting the sustainable use of resources.
- Increase of recycling rate and improvement of the quality of recycled materials.

Fig. 1 shows the variation in stocks of collected waste categories (non-hazardous and hazardous waste) for three cities in Romania: Bucharest, Brasov and Tulcea in 2010.

The first and most important current aspect in the collection and recycling of waste, especially metal scraps, in Romania is the negligence in respecting the principles of sustainable development. Under this point of view, metallic waste collection and recycling had a quantitatively “boom” during 1991–1993.

The businesses in the area thought that this activity would have increased but the quantity of the waste (particularly metals) generation, decreased dramatically because of the economic crisis and the exponential falling of national economy.

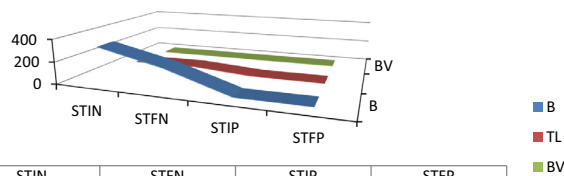


Fig. 1. Changes in stocks of waste categories. STIN – initial stock of non-hazardous waste [t/year]; STIP – initial stock of hazardous waste [t/year]; STFN – final stock of non-hazardous waste [t/year]; STFP – final stock of hazardous waste [t/year]; B – Bucharest; TL – Tulcea; BV – Braşov.

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Effects of solid waste management in slum areas during mass gathering in Allahabad Religious City, India

Many cities in India have been facing serious threat originated due to urban solid waste management practices. The increasing human population, rapid economic growth and rise in community living standards are the major drivers of migration of people from rural area to urban area. This has led to the increase in slums in the cities. The authorities need to consider basic human requirements, including adequate public toilets, sufficient capabilities for the disposal of liquid and solid wastes, and control of rodents and insects that affect health. Mass gathering festivals have many positive social and economic benefits, but howsoever several negative impacts are also there. When the density of people becomes too high chances of injury and illness, severe traffic delays, and pollution increase. The solutions for waste management problems, particularly in slums and squatter settlement area, are immensely difficult. Rapid Impact Assessment Matrix (RIAM) can be used as decision support system for MSW management system.

Allahabad is an ancient religious holy city of Uttar Pradesh, India. From the 14th of January (month of Magh in the Hindu calendar) of every year and for about 45 days, the pilgrims gather at the confluence point Sangam to perform a series of sacred rituals notably to bathe in the rivers. Millions of people attend the Maha Kumbh Mela every twelfth year; the Ardh Kumbh Mela every six years and the Magh Mela every year. The manifold increase in population during Magh Mela exacerbates the already strained infrastructure facilities associated with SWM. This study examines the existing conditions of solid waste management systems in slum areas near Sangam (Daraganj, Allahpur and Kydganj) before, during and after Magh Mela using RIAM. Suitable numerical values to the various components (physical/chemical, biological/ecological, social/cultural and economic/operational) based on the questionnaire conducted (before,

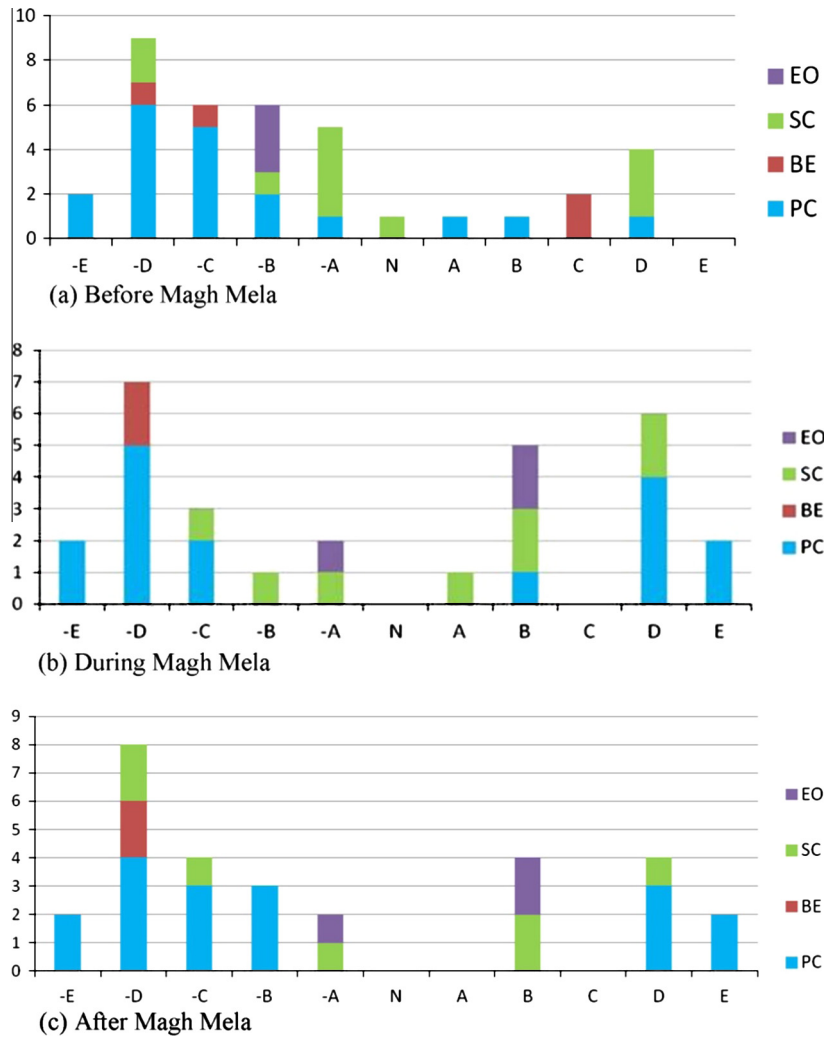


Fig. 1. ES score of individuals component, (a) before, (b) during, and (c) after Magh Mela. (PC) Physical/chemical – fifteen questions on physical/chemical aspects, (BE) biological/ecological – three questions on biological/ecological aspects, (SC) sociological/cultural – five questions on human aspects/cultural aspects, (EO) economical/operational – three questions on the economic consequences.

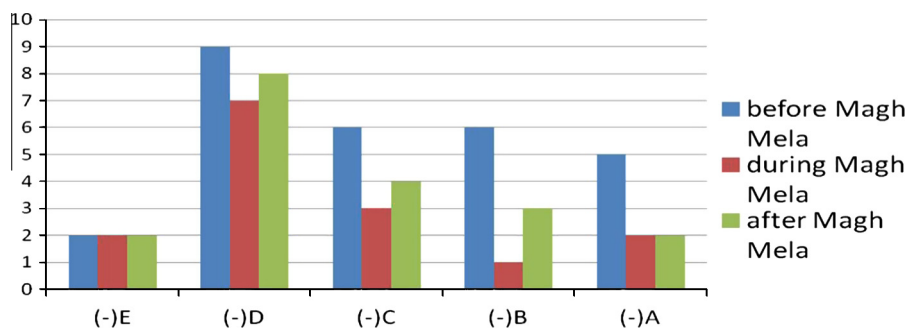


Fig. 2. ES score of all the negative impacts.

during and after Magh Mela) in 130 houses were assigned to the evolution criterion used in RIAM tool (Pastakia, 1998; Pastakia and Jensen, 1998).

The inferences derived from the questionnaires received from the residents before, during and after Magh Mela have been analyzed. ES score of individual components were calculated through RIAM analysis. The summary of the ES score of all environmental components

are illustrated in Fig. 1(a)–(c). Before Magh Mela the existing situations and the SWM system in the slum areas have considerable negative components. The major areas of concern are the physical factors (such as amount of waste generated, waste disposal ways, waste collection, toilet and water facilities) and the social factors (such as problems faced by the slum residents). During Magh Mela, the negative components of the SWM system in the area have

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