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Sustainable Waste Management in the Republic of Uzbekistan

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Abstract: In this article we analyzed theme Sustainable waste management in the Republic of Uzbekistan and in total 22 articles were downloaded, including foreign articles.
Keywords: waste, waste management, ecology, Presidential Decrees, the Republic of Uzbekistan, SCEEP, Convention

INTRODUCTION

"Wastes" are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

"Management" means the collection, transport and disposal of hazardous wastes or other wastes, including after-care of disposal sites. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

LITERATURE REVIEW

In total 22 articles were downloaded and analyzed, including foreign articles.

ANALYSIS and Results

The Basel Convention on the Control of Transboundary movements of Hazardous Wastes and their Disposal was adopted in 1989 and it came into force in 1992. It is the most comprehensive global environmental agreement on hazardous wastes and other wastes. With 175 Parties (as at 31 March 2011), it has nearly universal membership. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as "hazardous wastes" based on their origin and/or composition and their characteristics. The provisions of the Convention center around the following principal aims: (i) the reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal; (ii) the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and (iii) a regulatory system applying to cases where transboundary movements are permissible. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

Over the past 20 years, the Basel Convention has had ample occasion to adjust to new global developments and needs with regards to waste management over the years, and has risen to these challenges. With the added benefit of closer cooperation with the Rotterdam and Stockholm conventions, the Convention now has the potential to start considering wastes more in a life cycle

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context. This will make it possible to embrace new ways of thinking. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

The Basel Convention plays a decisive role in achieving the Millennium Development Goals (MDGs)-poverty reduction, reducing child mortality, improving maternal health, ensure environmental sustainability. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

Waste minimization undoubtedly leads us to achieving the MDGs. In addition, state-of-the art recycling in accordance with agreed standards could create business opportunities and safe jobs; a higher yield of secondary raw materials; conservation of precious resources through extraction and re-use rather than primary mining; and better protection of the air, soil, water and thus human health. Realizing this potential might also lessen the incentives for illegal recycling operations, through providing legal, safe and economically rewarding alternatives.

“Transboundary movement” means any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

“Environmentally sound management of hazardous wastes or other wastes” means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes. (2011, Basel convention on the control of transboundary movements of hazardous wastes and their disposal)

The main tasks and activities of the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection: (Presidential Decree of April 21, 2017 No. PD-5024 "On improving the system of public administration in the field of ecology and environmental protection")

State administration in the field of ecology, environmental protection, rational use and reproduction of natural resources;

Ensuring a favorable ecological state of the environment, the protection of ecological systems, natural complexes and individual objects, the improvement of the ecological situation;

Implementation of state control over compliance with legislation in the field of waste management, the organization of an effective system for the collection, transportation, disposal, recycling and disposal of household waste, in close cooperation with the local authorities and the self-government of citizens;

State environmental control over compliance with legislation in the field of protection and use of land, mineral resources, water, forests, protected natural areas, flora and fauna, protection of atmospheric air;

Coordination of work on ecology and environmental protection, ensuring interdepartmental cooperation in the development and implementation of a unified environmental and resource-saving policy;

Maintaining a state cadastre in the field of ecology and environmental protection, as well as state registration of nurseries for the breeding and maintenance of wild animals, wild plants, zoological and botanical collections;

Organization of environmental education, propaganda and education, as well as retraining and advanced training of specialists in the field of ecology and environmental protection.

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(Presidential Decree of April 21, 2017 No. PD-5024 "On improving the system of public administration in the field of ecology and environmental protection")

Fundamentals of legal activity

– Presidential Decree of April 21, 2017 No. PD-5024 "On improving the system of public administration in the field of ecology and environmental protection";

– Resolution of the President of the Republic of Uzbekistan of April 21, 2017 No. PP-2915 "On measures to ensure the organization of the activities of the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection";

– Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated January 15, 2019 No. 29 “On Approving the Provision on the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection”;

– Resolution of the President of the Republic of Uzbekistan dated October 3, 2018 No. PP-3956 "On measures to ensure the organization of the activities of the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection";

Projects that are going connected with waste management:

1. In accordance with the Resolution of the Cabinet of Ministers No. 895 of November 1, 2018, the Republic of Korea with the participation of the company "Sejin G&E Co., Ltd." Investment project "Generation of electricity through the processing of waste gas at the landfills" Ahangaron "and" Maidontol "in Tashkent region";

2. Project "Reclamation and construction of landfills in the Republic of Karakalpakstan and Khorezm region" with the participation of the European Bank for Reconstruction and Development (EBRD) in the framework of the implementation of the Decree of the President of Uzbekistan dated February 1, 2019 No PD-4145;

3. In accordance with the Resolution of the Cabinet of Ministers No. 748 of November 25, 2020, the project "Sustainable Solid Waste Management" is being implemented with the participation of the Asian Development Bank.

4. Project “Modernization of solid waste management in Samarkand” with the participation of the French Development Agency (FRA), dated April 17, 2019 No. PD-4291 “On the approval of the strategy on solid waste management in the Republic of Uzbekistan for the period 2019-2028”

Finished projects that are connected with waste management:

In accordance with Annex 7, paragraph 12 of the Resolution of the President of the Republic of Uzbekistan dated April 29, 2019 No PR-4300 "On measures to further improve the mechanisms for attracting foreign direct investment in the economy of the Republic" in Tashkent and Tashkent region (Bekabad) It was planned to organize services for the collection and disposal of household waste on the basis of public-private partnership with the participation of the Asian Development Bank. The consulting company "Roland Berger GmbH " of the Federal Republic of Germany worked in the following areas within the project:

identification of the most optimal project structure for the development of solid waste management services on the basis of public-private partnership;

the scale of public-private partnerships, initial cost estimates, demand, revenue opportunities, economic stability, private sector opportunities, project risks and socio-economic

and preparation of a report on the concept of the project on environmental issues;

determine the basis for the transition to the stage of project preparation and development;

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increase the capacity of the Government of Uzbekistan in the analysis of various methods of public-private partnership in the solid waste management sector, the development and identification of project selection methods;

identification of key aspects of the private sector participation strategy in the development of solid waste management;

the main points of the optimal tender process for concept contracts in future Public-Private Partnership Agreements and determining the general conditions.

According to sanitary rules and norms of the Republic of Uzbekistan No. 0317-15, medical waste is classified into the following groups. Waste classification of medical institutions No. Hazard class Characteristics of the morphological composition of waste.

Class A - non-hazardous non-hazardous waste - not in contact with biological fluids of patients, infectious patients; non-toxic waste - food waste from all departments of health care facilities, except for infectious, phthisiatric; furniture, inventory and faulty diagnostic equipment that do not contain toxic elements 2.

Class B - hazardous (risky) hazardous (risky) waste - potentially infectious waste; organic operating waste; waste from infectious wards; wastes of microbiological laboratories working with microorganisms of 3-4 groups of pathogenicity; biological waste from vivariums.

Class C - extremely dangerous all materials in contact with patients with especially dangerous infections; wastes from microbiological laboratories working with microorganisms of 1-2 pathogenicity groups; phthisiatric waste.

Class D - waste drugs close to industrial waste in composition; disinfectants not to be used; cytostatics and other chemicals; mercury containing objects, devices and equipment.

Class E - radioactive waste all types of waste containing radioactive components in which the content of radionucleides exceeds permissible levels Today, the operation of incinerators is an important element of modern urban life and helps to solve social problems.

Payment per kg of paper / plastic / glass and other materials upon delivery:

Waste paper:

White - 2500 sum

Gray - 1700 sum

Newspaper - 5000 sum

Plastic and bottles from 700 sum to 1000 sum per 1 kg

Waste of transparent Polyethylene from 2200 sum to 3000 sum per 1 kg

The “law of the Republic of Uzbekistan on Waste” is currently under review, and it is expected that an updated version will soon be published. it is planned that the revised version will include a chapter on healthcare waste management, which was provided by the ministry of Health. However, this chapter is still under discussion. it is expected that the new law will also include a clearer definition of the different waste streams. (2014, UNDP, Rapid assessment: Healthcare waste component of global fund HIV/AIDS projects in Uzbekistan)

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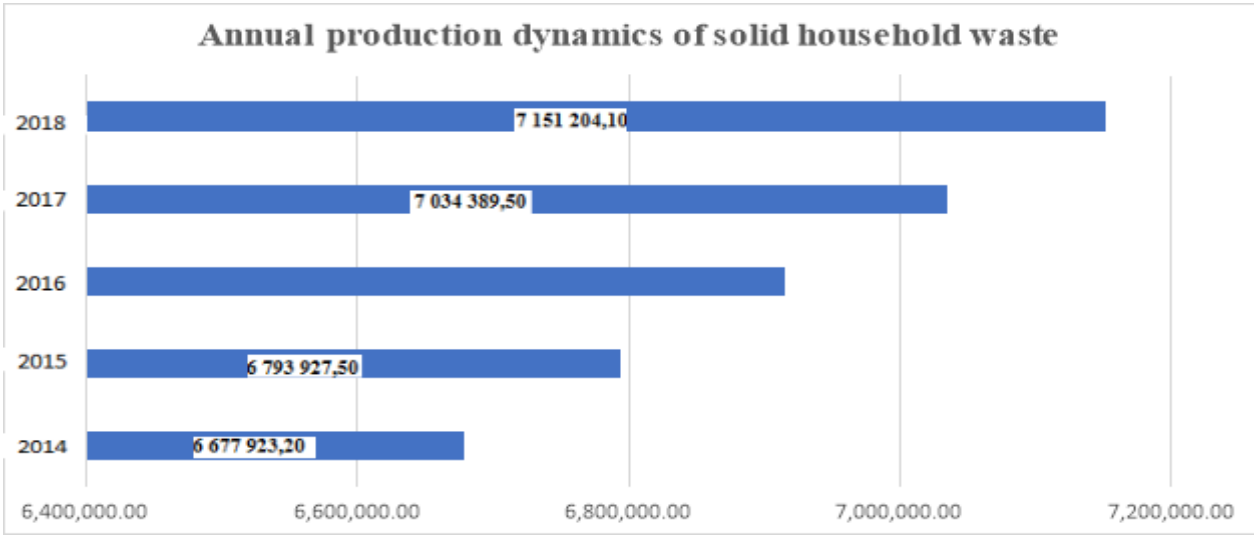
T/P	Name of regions	Amount of solid household waste generated in the regions (tn)				
		2014	2015	2016	2017	2018
1	The Republic of Karakalpakstan	380 293,50	386 118,90	392 250,90	398 032,50	403 485,60
2	Andijan region	614 404,50	625 748,70	637 399,50	648 787,50	659 540,40
3	Bukhara region	384 651,60	391 002,60	397 528,80	403 726,50	409 530,00
4	Jizzakh region	268 669,20	273 771,90	279 465,90	284 919,00	290 153,10
5	Samarkand region	754 586,40	769 741,20	784 874,10	799 722,30	814 592,40
6	Surkhandarya region	505 517,70	516 467,70	528 118,50	539 243,70	550 368,90
7	Syrdarya region	167 272,20	170 184,90	173 141,40	175 878,90	178 638,30
8	Namangan region	548 397,90	559 369,80	570 144,60	580 875,60	591 081,00
9	Navoi region	197 340,90	199 990,80	203 210,10	206 473,20	209 758,20
10	Fergana region	741 643,50	754 433,10	767 660,70	780 691,20	792 801,90
11	Khorezm region	368 817,90	375 716,40	382 571,10	389 097,30	395 229,30
12	Kashkadarya region	634 070,70	647 999,10	662 606,40	676 447,20	689 433,90
13	Tashkent region	1 112 257,20	1 123 382,40	1 136 018,70	1 150 494,60	1 166 591,10
Total		**6 677 923,20**	**6 793 927,50**	**6 914 990,70**	**7 034 389,50**	**7 151 204,10**
)* The amount of waste generated in the city of Tashkent and Tashkent region						

The dynamics of amount of solid household waste generated in the regions of the Republic of Uzbekistan (tn) during 2014-2018 years http://www.uznature.uz/en



Annual production dynamics of solid household waste during 2014-2018 years http://www.uznature.uz/en

CONCLUSION

Overall, educating children from childhood how to sort each type of waste is very comprehensive. Detailed learning of each waste is important. For example: yellow is paper, red is metal, green for glass and blue for plastic. After that, it goes to recycling factory. Thus, there can be

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received second raw material. Educating next generation, keeping clean, protecting ecology is in our hands!

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