

Partner and Stakeholder Updates from Sri Lanka

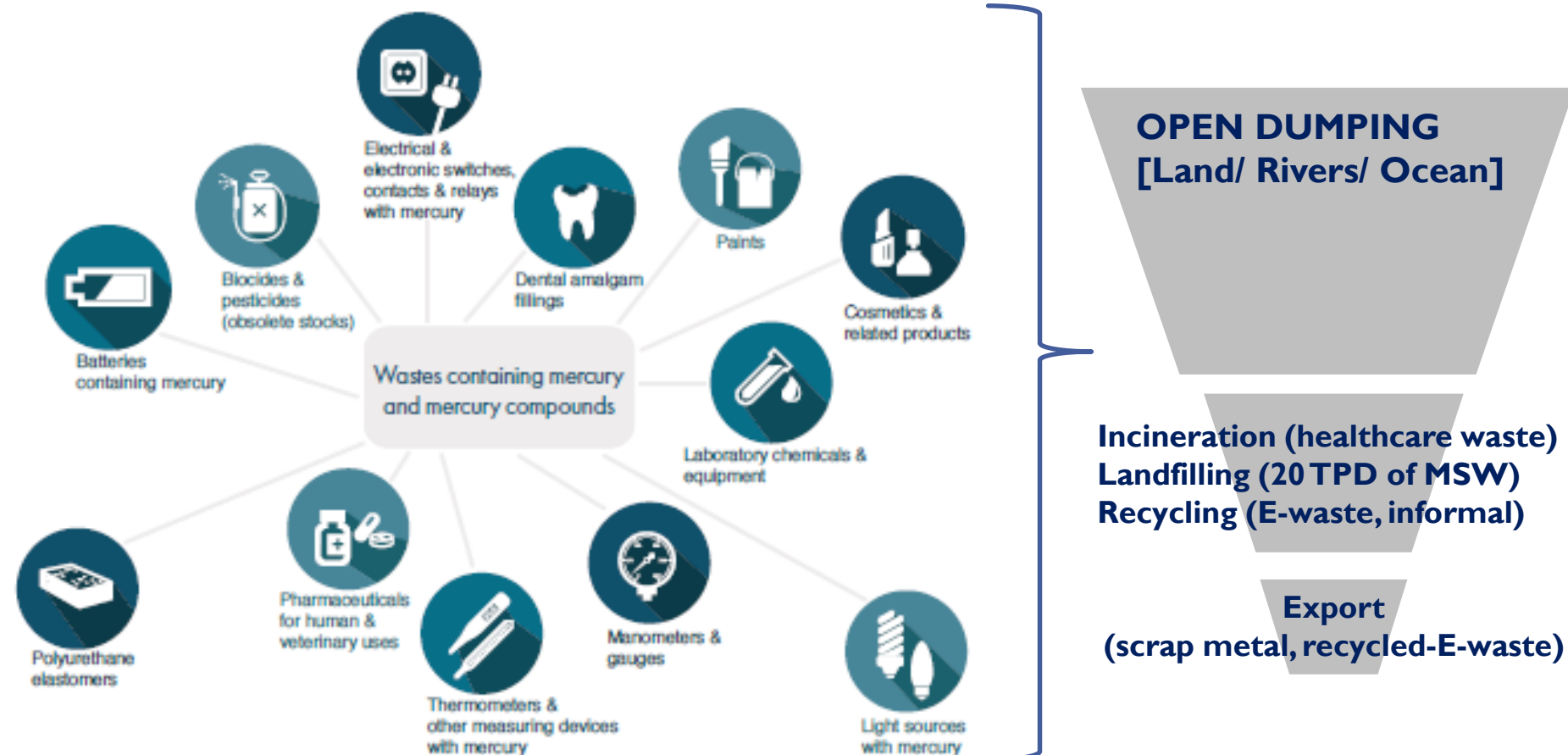
“The Need for Mercury Monitoring”

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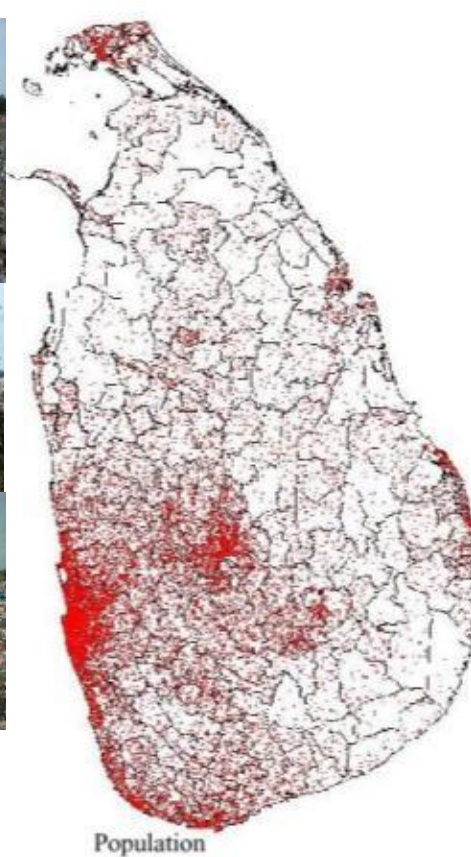


PRESENT STATUS OF WASTE MANAGEMENT



MUNICIPAL SOLID WASTE OPEN DUMPS

Class C (50-200t/d)	t/d
Kandy	~150
Kotte	~90
Maharagama	~80
Kaduwela	~55
Kalmunei	~70
Katththankudi	~60
Kurunegala	~50
Anuradhapura	~50
Negambo	~90
Panadura	~50
Galle	~70
~ 10	
Class D (>200t/d)	t/d
Kollonnawa	~1000
Karadiyana	~500



Class A (<10t/d)	#
Pradeshiya saba	200
Urban councils	5
~205	

Class B (10-50t/d)	#
Pradeshiya saba	30
Urban councils	35
Municipal councils	5 (3)
~70	

~ 300 dumpsites in the country











**1st Sanitary Landfill started in 2014
20 Metric Tons/ Day**

**2nd Sanitary Landfill (Aruwakkalu)
500 Metric Tons/ Day (by 2020)**



ISSUE & CHALLENGES

1) **Insufficient infrastructure for MSW, Hazardous, Industrial waste management**

- ❖ Collection & Transport
- ❖ Treatment, processing and
- ❖ Disposal

2) **Policy & Regulations**

- ❖ Gaps in monitoring and regulating (prioritization)
- ❖ Implementation

3) **Lack of Research and Development initiatives**

- ❖ Research and development infrastructure
- ❖ Research funds

4) **Knowledge / Awareness**

- ❖ Academics, researchers, administrators
- ❖ Public

RESEARCH, ASSESSMENT AND MONITORING

Heavy metal concentrations in landfill leachate and the maximum tolerance limits of heavy metals. Values are in $\mu\text{g L}^{-1}$									
Sample	Cr	Fe	Ni	Cu	Zn	As	Se	Cd	Pb
Matale	345	60762	115	573	6876	522	1935	100	1777
Hambantota	80	5341	226	166	19909	678	2522	172	492
Kataragama	11	1117	89	58	638	106	400	50	123
Bandargama	329	7167	912	227	5362	722	2607	90	479
Kolonnawa	1968	346930	4473	55	11759	705	2443	15	421
Gampola	220	5546	335	734	462	164	461	4	34
Gohagoda	139	3004	331	334	389	148	465	1	19
Wennappuwa	363	2501	399	431	409	939	2812	53	87
Rathnapura	439	56343	1311	627	1685	1551	4922	52	168
Negombo	330	20111	666	535	2062	846	2184	51	333
Matara	830	7528	571	464	500	1219	3705	48	60
Galle	486	15477	673	564	593	1796	5947	52	169
Max. permissible level	100	3000	3000	3000	5000	200	500	100	100

Mercury ?

WAY FORWARD: RESEARCH COLLABORATIONS



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மகாவலி அபிவிருத்தி மற்றும் சுற்றாடல் அமைச்சு
Ministry of Mahaweli Development and Environment



**MEMORANDUM OF UNDERSTANDING
FOR RESEARCH COLLABORATION ON INVESTIGATION OF MERCURY RELATED ISSUES AND
MONITORING IN SRI LANKA
BETWEEN
MINISTRY OF MAHAWELI DEVELOPMENT & ENVIRONMENT, SRI LANKA
AND
UNIVERSITY OF PERADENIYA, SRI LANKA**

This MOU made on March 2017, by and between **Ministry of Mahaweli Development & Environment**, Sri Lanka, whose address is 82, Sampath Paya, Rajamalwatte Road, Battaramulla, Sri Lanka, hereinafter referred to as **"MoMD&E"** and **University of Peradeniya**, Sri Lanka whose address is University of Peradeniya, Peradeniya herein referred to as **"University"**.

1. MoMD&E and University seek to enhance relations between Institutes by developing Research Collaboration on Investigation of mercury related issues and monitoring in Sri Lanka.
2. Within each Institute's framework of the regulations applying in each institute, and subject to the availability of resources, the following programmes and activities will be encouraged:
 - **Collaborative Study on Technical Needs of Mercury Management in Sri Lanka by MoMD&E and University**

1ST STEP- WET DEPOSITION SAMPLING

- Establish “wet deposition collector” station at University of Peradeniya
 - Weather station (7°15'7.19"N 80°35'40.86"E) ~500 m above MSL



CAPACITY DEVELOPMENT

- **Our Strength:** Human resources, basic facilities, multidisciplinary & collaborative research
- **Training Needs:** Mercury Monitoring (for academics, researchers, technicians)
- **Collaborative Research & Development:** Policy & legislation formulation, environmental assessment, monitoring
- **Knowledge & Technology Transfer:** Recovery and recycling, alternative technologies
- **Networking:** APMMN