Cambodia Country Presentation

"Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency- A 21st Century Vision for Asia-Pacific Communities"

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Phnom Penh Capital, and Battambang Municipality

Official Name :	The Kingdom of Cambodia
Area	181,035 km2
Population (CSES 2015): Projected to increase to by 2030	~16 million people now
Administrative divisions	the Capital (Phnom Penh) and 24 provinces;
Urban Rural Divide (ADB-CDTA 8121):	30:70 (~4 million people in urban and urbanising areas)
Poverty Rate (2015) (NSDP MtR 2017)	13.5% (2015) 10% (Draft UN-CCA 2018)
Slum Population (UNHABITAT World Cities Report 2016)	55% of the Urban Population reported living in Slum conditions

Cambodia is categorised as one of the 47 Least Developed Countries (LDCs) in the World, and is likely to remain so till the 2030s (UNCTAD 2017).

 This is due to its continued social and economic vulnerability and its ongoing dependence on agriculture,



The Current Situation of Waste Management in Cambodia

- Cambodia is encountering an increasing number of environmental pollution challenges including air, water,
 and solid waste pollution. Waste generation in Cambodia has been exacerbated by the expansion of the
 industrial and service sectors and a rise in rural-urban population. Waste collection and management is
 widely recognized as an issue that needs to be addressed.
- Population growth and rural-to-urban migration have increased remarkably over the last decade in Cambodia and led to an increase in waste generation in cities. It is calculated that 14 million people can generate approximately 6, 818, 000 tons of waste per year. This calculation is based on a 2005 study arguing that a person in Phnom Penh is likely to generate 0.478 kg of waste per day. It is also observed that most of the waste generated in urban areas is thrown into surface water, deposited at public spaces, along streets or at vacant areas near to the residential.

The Current Situation of Waste Management in Cambodia





- Public awareness on how to manage waste and the adverse effect from improper waste management is generally low.
- Indiscriminate dumping and burning of waste from households and markets is common, especially in areas where there is no or irregular waste collection. Littering causes blockages in the drainage canals and flooding during rainy seasons.



The present landfill in Battambang, or rather dumpsite, is a great environmental and health concern, especially for the waste pickers residing there

Major Achievements/ New Initiatives in 3R areas #1

- The Cambodia (national) Climate Change Strategic Plan 2014 2023 adopted by the Royal Government in 2013, intends to promote renewable energy & energy efficiency to reduce Greenhouse Gas (GhG) emissions and impacts on health, including by;
 - Developing integrated measures for better consideration of solid waste & wastewater management and
 - Conduct sectoral analyses on low emission options and sources of emission (in a range of sectors, including waste management);
- In response the Ministry of Land Management, Urban Planning and Construction adopted its **Climate Change Action Plan** in 2015 and included;
 - Better consideration of environmental, climate change, & waste management issues in Municipal and other Land Use Planning processes and their development guidelines; With 22 new plans (15 cities, 3 districts & 5 urban areas) to be approved by government in the coming months.
- The government has also developed a **Green City Strategic Planning Methodology** with support from the Global Green Growth Institute (GGGI), this is currently being applied in 7 'major' cities, includes consideration of pollution and waste management issues;
- A wide-ranging national <u>Environment & Natural Resources Code</u> is currently in the final stages of development. With improved consideration of pollution control and waste management issues including incorporation of the 3R, environmental and sustainable cities planning concepts.

Major Achievements/ New Initiatives in 3R areas #2

- A targeted comprehensive Waste Management Strategy for Phnom Penh Capital, has been developed and is awaiting adoption;
- An evolving national legislative and regulatory framework to better guide and the management by local authorities and involve other stakeholders;
- Increasingly responsive and responsible Sub National Administrations (local government) in cities and provinces, backed by additional national budget allocations.
- A range of innovative projects underway or learnt from to advance 3R concepts; including
 - "Reducing Plastic Bag Waste in Major Cities of Cambodia" through the European Union supported Switch-Asia window
 - Community Sanitation and Recycling Organisation http://www.bigpond.com.kh/users/csaro/
 - UNESCAP's supported Waste 2 Resources http://waste2resource.org/cambodia/
 - Cambodia's Anti-Plastic Bag Campaign supported by UNESCO and Partners https://www.youtube.com/watch?v=0CiF8pU0gAo
 - Cambodia: Reduce, Reuse, Recycle organisation https://www.youtube.com/watch?v=chuPIreQSCQ
 - Cambodia Clean Cities http://www.cambodiacleancity.gov.kh

Major Plans including mega projects/ master plans –future actions

- A new Environment and Natural Resources Code is current under development with improved consideration of waste issues including incorporation of the 3R concept.
- A new comprehensive Phnom Penh Waste Management Strategy is pending that will actively guide, mainstream and apply 3R principles and approaches for the Capital Waste Management.
 - The Capital Phnom Penh also urgently needs to find and develop a new sanitary landfill, the process for which encourage and support 3R approaches for volume and waste reduction.

Some good
Example
From
Battambang
City



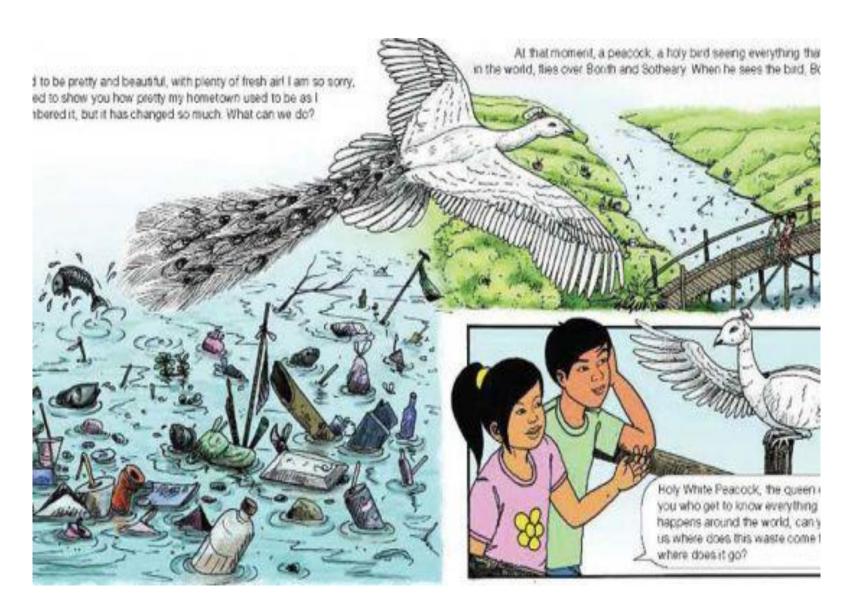




Composting facility in Battambang city

The recycling organic compost operated by COMPED

- -Waste into compost processing centers 3 tons day and can produce to 7 tons / month
- Biogas processing
- 3 biogas plants) influent 240 kg / Day For use for cooking , lighting and generation.



One of the comics being distributed in Battambang as part of the Don't Waste Your Waste campaign.

A number of educational and awareness-raising activities on waste management have been undertaken by the provincial and municipal administrations of Battambang





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ប្រព័ន្ធគ្រប់គ្រងសំរាម សំណល់រឹងទីប្រជុំជនក្នុងក្រុងបាត់ដំបង ត្រូវអនុលោមតាមស្តង់ដា និងគោលការណ៍ ដូចខាងក្រោប៖

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- កបែងចែកសំណល់ដាច់ដោយឡែក) គ្រប់គ្រាន់ក្នុងកាប្រេមូល និងដឹកជញ្ជូនសំរាម សំណល់រឹង
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- ត្រូវមានបុគ្គលិក កម្មករជំនាញគ្រប់គ្រាន់ សម្រាប់បម្រើការឲ្យការសម្អាត ការប្រមូល និងដឹកជញ្ជូន។
- ត្រូវមានឯកសណ្ឋានសុវត្ថិភាព និងតម្រូវឲ្យកម្មករស្លៀកពាក់ឯកសណ្ឋានសុវត្ថិភាព
- ្រូវមានកាលវិកាគ ផែនទី សម្រាប់ប្រតិបត្តិការប្រមូលដឹកជញ្ជូនសំរាម សំណល់រីងឲ្យបានច្បាស់ លាស់ និងធ្វើការផ្សព្វផ្សាយឲ្យបានទូលំទូលាយ
- ត្រូវធ្វើការបែងចែក វេចខ្ចប់សំរាម សំណល់ដៃដាច់ដោយឡែក និងត្រូវមានរថយន្តដឹកជញ្ជូនសំរាម សំណល់រឹងដាច់ដោយឡែកពីគ្នា
- ក្រូវបញ្ចូលគោលការណ៍ ៣អ៊ារ (3R) ការកាត់បន្ថយការប្រើប្រាស់ ការប្រើប្រាស់ឡើងវិញ និងការ
 កែច្នៃឡើងវិញ
- ត្រូវមានការគ្រប់គ្រង រៀបចំទីលានចាក់សំរាម ស្របតាមគោលការណ៍ណែនាំសុវត្ថិកាពបរិស្ថាន
- ត្រូវមានយន្តការត្រួតពិនិត្យ. តាមដាន វាយតម្លៃលើការប្រមូលដឹកជំពាន កែច្នៃសំរាម សំណល់រឹង



ខំពុភនី ៤ អខសានចញ្ញត្តិ

15ಕ್ಟಾಣಕ್ಟು

មន្ទីរសេដ្ធកិច្ច និងហិរញ្ញវត្ថុ -សេលសេងកំពង់១០

ក្រុមប្រឹក្សាក្រុង គររោះអភិបាលក្រុង ការិយាល័យរៀបបំសោក័ណភាព និងគ្រប់គ្រងកាតសំណល់ក្រុង ការិយាល័យ អង្គការាចំណុះរដ្ឋបាលក្រុង ប្រតិបត្តិកផ្ដល់សេវាប្រមូលដឹកដីញូនសំណល់ ភាគីពាក់ព័ន្ធផ្សេងទៀតនិង ប្រជាពលរដ្ឋទាំងអស់ក្នុងក្រុងបាត់ដំបង ត្រូវអនុវត្តដីកានេះ ឱ្យមានប្រសិទ្ធភាព ចាប់ពីថ្ងៃចុះហត្តលេខនេះតទៅ។ 2 ធ្វើនៅបាត់ដំបង, ថ្ងៃទី ១៣ ខែវិទីភាថ្នាំ ២០១៧

The first Deika (Local law) on solid waste management in Cambodia has been developed and approved by Battambang municipal council 2017, aiming to improve solid waste management, and promote public awareness and the implementation of 3R strategy.

Critical Challenges Faced

- Increasing volumes of often untreated and unprocessed urban waste (est. 1.4 million tonnes/yr) being dumped in all cities, often overwhelming 3R initiatives and;
 - Contributed too by more wasteful societal behaviours and practices;
- Continued lack of treatment/ processing systems & sanitary landfills in and for urban areas, most are simply 'dumps',
 - Resulting in air, water and land pollution, from continuous burning, leaching and poor O&M of dumps;
- Increasing concerns about pollution issues and the need for increased management, as the country has reached a "tipping point"!
- Limited and deficient investment in waste management systems,
 - The private sector concession model is not working effectively to deliver the quality of services required and demand by the public.
- Deficient education and understanding of waste issues by the public, resulting in considerable fly tripping and dumping of waste

THANK YOU!