Sixth Regional 3R Forum in Asia and the Pacific

"3R as an Economic Industry - Next Generation 3R Solutions for a Resource Efficient Society and Sustainable Tourism Development in Asia and the Pacific" Malé, Maldives, 17-19 August 2015

City Report

(Draft)

<Phnom Penh>

This city report was prepared by Phnom Penh Capital City as an input for the Sixth Regional 3R Forum in Asia and the Pacific. The views expressed herein do not necessarily reflect the views of the United Nations.

Next Generation 3R Solutions for a Resource Efficient Society and Sustainable Tourism Development in Asia and the Pacific

Guideline for City Reporting on Major Initiatives/Achievements in 3R areas

The main objective of the City Reporting is to share among international community the progress, achievements and best practices, including various challenges faced, in the areas of **3R** (**Reduce, Reuse, Recycle**), and sustainable waste management. This would help development agencies, donors, including development banks, in assessing the needs and challenges of cities to better devise their existing as well as future capacity building programs and operations in the field of 3Rs and sustainable waste management.

It would be appreciated if a consolidated city report could kindly be prepared by answering the following questionnaire (7 Questions in total) and submitted to the **Secretariat of the Regional 3R Forum in Asia and the Pacific** by email to 3R@uncrd.or.jp

Timeline for submission: 17 July 2015

Secretariat of the Regional 3R Forum in Asia and the Pacific United Nations Centre for Regional Development (UNCRD)

City Report <u>[City Name: Phnom Penh Capital City]</u> Sixth Regional 3R Forum in Asia and the Pacific, 17-19 Aug 2015, Male, Maldives		
Q 1	What are the roles of local government stipulated in the 3R-related policies, acts, laws, or regulations?	
	Phnom Penh Capital Hall has a Waste Management Division as secretary, according to Declaration No 4273 on "the Establishment on Offices under Divisions of Phnom Penh Capital Hall, Establishment of Offices under District; and the Determination of Roles, Duties and Working Procedure of these Offices" promulgated by the Ministry of Interior in 2009.	
	The Waste Management Division has two subordinated offices and has the following roles and duties such as: managing data on waste; formulating waste management plan; developing principles and measuring for waste management; communicating with relevant institutions and development partners to promote waste management; disseminating and educating the public in order to promote awareness and participation in the waste management; cooperating with expertise and local authorities in order to prevent environmental impact caused by the waste; solving environmental deputes caused by the waste; managing waste disposal places; managing activities related to waste collection and transport services; managing waste recycle and processing; and managing liquid waste pumping and storage.	
	Besides roles and duties of the division, it also has Joint Declaration No 80 on "Solid Waste Management in Cities and Provinces" made between the Ministry of Environment (MoE) and the Ministry of Interior (MoI) approved in 2003. Refer to Chapter 5, Articles 11, 12, 13 of this, especially in Art. 13: Local authority, especially commune council with the cooperation with related institution or unit to provide education and disseminate to people about dumping solid waste which cause no harm to the environment in the purpose of reducing the quantity at the landfill site need the encouragement of the activity of reusing or recycling solid waste in the territory of its own sovereignty.	
Q 2	Is 3R policy integrated in your city development strategy or master plan? (Please attach photo(s) of your city's waste management if available.)	

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☑ Yes => Please share goals/visions/major achievements/important lessons learnt that could be replicated elsewhere.

Base on City Development Strategy 2005-2015 of the Phnom Penh Capital Hall in version 2 on Environmental and Natural Resource, in goal 2.2: To manage and dispose solid waste to safeguard public health. There are four strategies: 1: Establish a comprehensive waste collection and disposal system and infrastructures; 2: Prevent pollution from toxic and hazardous wastes; 3: Reduce waste to disposal facilities; 4: Recycle and reuse waste and incorporate green zone in city development plan.

Presently, the Phnom Penh Capital Hall is concentrating and working very hard on solid waste management and 3Rs concept. The 3Rs concept is becoming as popular and recognized as an accurate procedure to deal with the solid waste matter which causes environmental degradation. In Phnom Penh, the authority has conducted dissemination campaigns to promote on solid waste management and 3Rs. For example, bio-gas program is becoming a very good means of saving money for people living in suburb areas. People use animal manuals to produce electricity and gas for cooking. Furthermore, almost all households in Phnom Penh separate recycled materials from other kitchen wastes in order to make profit. Those recycled materials are sold to China, and our neighbour country, Vietnam. Additionally, at the public markets, vendors are educated to sort their wastes into two types, wet and dry. The wet waste refers to the bio-degradable waste that needs to be unloaded to the dumping site.

Lesson learned from the past experience on waste management and 3R. Regarding to sustainable activity in managing garbage, Phnom Penh Capital City has attentively mainstreamed knowledge of garbage management and 3R in the education system and educational curriculums. All education institutions 218 in the whole Phnom Penh Capital City have sanitation and environment programs, cleaning and separation of solid waste program, a program to classification of garbage by types, compost fertilizer production program, biodiversity gardening program and so on..., with the slogan "Clean City Good Environment"

Activities to increase knowledge about garbage management and 3R are regularly implemented by Phnom Penh Capital Hall through dissemination of information via billboards, leaflets, radio and television. For example, in 2010, with the aim of minimizing the quantity of garbage in the final disposal, the Phnom Penh Capital Hall has launched the penalty program for littering person. This program contributed to preliminary disposal in proper manner and could be used for an extended landfill life through separation of garbage to be reused and recycled, and also has launched a campaign to educate people about the importance of garbage separation as well as to punish those who do not put out their garbage properly. This campaign has been operating concurrently in twelve districts and implementing in big markets and various public parks has commenced. Currently this campaign is being implemented in all markets in Phnom Penh Capital City. The lesson learned from the experiment, easily implemented, is that homeroom teachers and commune chiefs in Phnom Penh act as models for the public. Actually, when they launched a garbage collection campaign in public areas, all the aforementioned management promoted the people living in their areas to clean waste regularly and put out garbage properly.

In order the help the habit of separating garbage and reducing hazardous substances mixed

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with garbage and discarded at the dump site, Phnom Penh Capital Hall has created a policy of placing used battery waste separately from the garbage. Consequently, Phnom Penh Capital Hall has organized the actual collection system of used battery waste starting from the students collecting from their homes to store at their schools and some collecting points such as super markets, hotels, embassy and NGOs. As the result, in 2014, there are total 405 tons of used battery has been collected and stored in the proper manner, waiting for treatment process.

Additionally, in concurrence with the national movement, the movement to reduce the use of plastic bags has been established. Phnom Penh Capital Hall has complied with the reduction of plastic use and gained experience at some large markets by signing an MOU with the 26 public and private markets with the aim of reducing the use of plastic bags and using other packaging materials produced form natural raw materials or eco-bag instead, with the slogan "Clean city is the city has no plastic bag flying in the air".



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Q 3	What are the major	challenges and constraints faced by your city in implementing 3R
	Despite, the authority implementation is not s boundary has been exp this, the waste being g the city authority to ha	mes? (Please answer only if your <u>answer to Q2 is "Yes</u> ") is now implemented to follow the 3Rs concept in place; however, the successful yet. In the last few years, the city has grown very fast and its anded to a double size which leads to increase population. Along with enerated from 1900-2000 tons per day that creates a big challenge for ndle. Nowadays, the new dump site of Phnom Penh almost gets full of ty has to seek for a new one to reserve, especially is finding investor to ecycling at the landfill.
	Financial constrains: Institutional/governance challenges:	 Lack of budget for buying facilities to treat the waste at the landfill, such as waste segregation facilities, waste processing and treatment facility, waste recycling facility and so on Lack of expertise at local implementing agency, policy maker and relevant stakeholders; Lack of strict and regular observance of monitoring and evaluation for implementing 3R. Lack of cooperation from the relevant institutes and engagement from the public or communities (national institute, local authorities of district, commune, citizens, line department and other private institutions); The final disposal of garbage at the landfill is not in compliance with

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		the technical standard, with garbage disposed of in a block pit
		without separating and processing it in order to reduce waste.
		- A number of hazardous waste (electronic, medicine, used batteries,
		storage batteries, neon lights, packages of chemical substance) have
		dramatically increase, and attention has yet to be paid to separating
		them from the natural waste.
	Policy gaps:	- Inadequate legislative frameworks and enforcing existing laws/
		regulations still has limited.
		- Lack of strategic plan, monitoring of work implementation.
	Other challenges such as	Lack of human resources for solid waste management and 3R
	technical capacity,	technical human resource.
0.4	human resources etc.:	
Q 4	of 3Rs?	n place in your city to support NGOs activities towards promotion
		education and dissemination on solid waste management and the 3Rs to be aware and participate in implementing it;
		re workshops, seminars, and disseminations to stakeholders on solid
	waste managemen	nt and benefit of 3Rs;
		gthen capacity building on Solid Waste Management and 3Rs to
	relevant officer.	
	- Share the best pr institutions.	actice in solid waste management base on 3R policy to other relevant
		study and vocational training related to the solid waste management utside of the country.
	-	n specialized support related to the environmental sustainability, living en and economic development.
	solid waste mana	lishing group capacity building network for improving capacity about gement based on the 3Rs principle (with the help of outside expertise provide training session).
		re document to attract donors and investors that interested in investing waste management and waste recycling.
	- Find the technical and 3R in Phnom	and financial support to better implement the solid waste management Penh.
Q 5	Is there any collabo organizations at interr	rative 3R related activity/project/partnerships with cities and
	0	f the project(s) including objectives, project partners, target, period,
	budget etc.	The project(s) including objectives, project partners, target, period,
	Previously, in Phnom	Penh Capital City, there were three non-governmental organizations
		cling, were named CITYNET, Csaro and Comped helped the local
	government to improve	poor people living condition by providing vocational training program d bio-gas activity. So far, these projects was finished few years ago.
	Recently in May 2014	5, Phnom Penh Capital Hall has been cooperating with Ministry of
		d Nations Industrial Development Organization (UNIDO) to implement

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the project on "Demonstration of Best Available Technologies-BAT and Best Environmental Practices-BEP in open burning activities in response to the Stockholm convention on POPs".

The project's main objective is to create resource efficient waste management systems to reduce unintentionally persistent organize pollution (U-POPs) emission through the introduction of BAT/BEP in open burning sources. Primarily, the project aims at achieving 5 major outcomes in each component as the followings: (1) Legislation Improvement: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category; (2) Institutional Strengthening: Enhanced institutional capacity to carry out BAT/BEP implementation; (3) Demonstration Activities: BAT/BEP implemented in open burning sources; (4) Education and Awareness: Improved knowledge and understanding on BAT/BEP and risks connected with U-POPS, GHG emissions and other contaminants released through open burning; (5) Monitoring and Evaluation: Established project management structure and the system for monitoring/evaluation of project impact. The period of implementing this project is sixty months. Under supported by Global Environment Fund.



Q 6 Even if your city doesn't have any dedicated 3R policies/programmes/activities, what future prospects or opportunities does your city have in 3R areas?

- Prepare a proposal to the national level to establish principle policy and additional regulation related to 3R.
- Disseminate the 3R concept to all people, market, school, and private production industry.
- Continue to organize a better trash bin and recyclable waste storage in big markets and along public road in Phnom Penh.
- Continue to encourage and promote the activity of reducing the use of plastic bag.
- Continue to have a safety collection and keep the used battery and electronic waste.
- Encourage the mechanism in collecting and transport damp and dry waste.
- Encourage NGOs and private investor to invest in waste recycling at the landfill site.
- Support and enforce the dissemination and education awareness by all mean to the public people on the importance of solid waste segregation, 3R concept and the enhancement of waste recycle.
- Organize needed regulation to guide and encourage the implementation of law and

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	 regulation that related to solid waste management and 3R. Organize necessary legislations and regulations to guide and to implement the solid waste management and 3R concept in the urban areas. Continue awareness-rising of households and local waste producer and capacity-building of local executing bodies. 		
Q 7	What type of 3R infrastructure and facilities your city is equipped with? Please tick the		
	appropriate.		
	☑ waste collection facility		
	□ waste segregation facility		
	☑ waste storage facility		
	□ waste processing & treatment facility		
	□ resource recovery facility		
	□ waste recycling facility		
	□ eco-industrial zones		
	□ science parks & theme parks covering 3R areas		
	□ others (please specify:)		

Thank you for your kind cooperation.