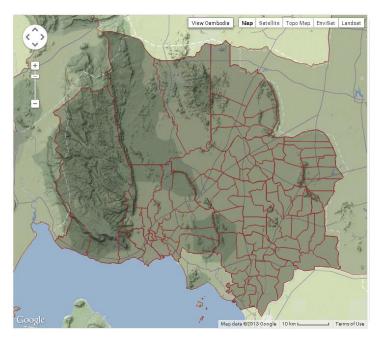


Decentralised Solid Waste Management in Kampot

Towards a realistic, sustainable, feasible and implementable solid waste management system in Kampot

Background

Kampot Province is located on the south-west coast of Cambodia. It is almost 5,000km2 and comprises of 7 districts and 1 municipality (Kampot City). Together the 7 districts are made of 88 communes while Krong Kampot (the city) further constitutes of 5 sangkats (totalling 93).



Source: http://www.opendevelopmentcambodia.net/maps/

The last population census in 2008 found that Kampot Province supported nearly 600,000 people, while Kampot Municipality had a population of approximately 40,000. 86% of the population in the Province are employed in the primary sector, 3% in the secondary sector and 11% in the tertiary sector. In the Municipality; 30% are employed in the primary sector, 14% in the secondary and 56% in



the tertiary sector (Census, 2008). The main resources at the municipal level include tourism, coastal development and some industrial activity.

Kampot City is well-known for its recent achievements in striving towards a sustainable and green city. It has been the chosen location for several ambitious pilot projects centring on recycling, composting, source waste management and awareness-raising of best environmental practice.

However, there is an apparent lack of clear roles and responsibilities with regard to the management of solid waste between the provincial, municipal, district and sangkat/commune administrations. Furthermore, the coverage of waste collection is lacking; informal roadside open dumpsites and illegal dumping into rivers are both a prevailing norm, as is 'informal' waste collection. 70% of all solid waste generated in Kampot Province is from households, and 60% of that is composed of organic materials. Prior to 2012, 36% of the total household waste in Kampot Municipality was collected by the contracted service provider (GAEA). This was reported to have increased to 59% as a result of the DELGOSEA Pilot Project which ended in May 2012.

In this era of rapid development and vastly increasing tourism; managing waste is a key challenge and of utmost importance alongside other issues such as sanitation, water quality, air quality, soil pollution etc. Crucial concerns which will be addressed in this workshop on decentralising solid waste management in Kampot include legislative, contractual, technical and financial aspects.

In the framework of the ongoing decentralisation and deconcentration policy of the Royal government of Cambodia waste management is one of the key areas where roles and responsibilities between administrative tears of government regarding the management and finance of waste need to be further fine-tuned. This workshop aims, based of the analysis of the status quo and international practices to develop a scenario and recommendations of how to best allocate resources (financial, technichal human resources) and administrative responsibilitioes and tasks to improve waste management collection services and finance within Kampot Province.



1 Objectives

The objectives of the workshop are:

- Sensitisation of city administration and competent authorities concerning structure and functionality of solid waste management – under the aspects of health / hygiene, environmental protection, resource management, possible facilities, regulations, knowledge and experiences as well as financing – and identification of gaps and opportunities of Kampot's solid waste management by;
 - Explanation of development background and status quo of western solid waste management – components and functionality from a western perspective at the example of Germany
 - Presentation and discussion about status quo of provincial/municipal solid waste management in Kampot
 - Discussion about the 3 main pillars: i) legislation/regulation and clearly defined roles and responsibilities of different tiers of local governments and the service provider (Focus), ii) financing and contractual arrangements between the provincial authorities and the service provider (Focus on relationship, transparency and oversight of the provincial/municipal authority over the service provider in this workshop), iii) knowledge and awareness building of those involved, e.g. citizens (not in focus in this workshop)
 - Presentation and discussion of a realistic and practical draft scenario
- Development of an adequate solid waste management for Kampot in future (further measures)

2 Target group

50-60 participants

- 1 Representative of Ministry of Environment
- 2 Representatives of Ministry of Interior
- 10 Representatives of Provincial Administration (8, from different line departments) and Provincial Council (2, from different political parties)
- 8 representatives from Kampot municipality (4 from the administration and 4 from the Municipal Council, from different political parties)
- 14 representatives from 7 districts (7 Officers of Environment and 7 District Governors)
- 5 representatives from 5 Sangkats
- 2 representatives of GAEA (include Chief of Market)
- 3 representatives of business/ hotel owners
- 2 representatives from CSO/NGO working in the field (scaro?)



3 Planned activities

The planned activities fall into i) preparation phase, ii) presentation phase (workshop) and iii) follow-up phase.

The preparation phase comprises:

- Accounting for the present German municipal solid waste management (task of KNOTEN WEIMAR GmbH)
- Accounting for the present status quo in Kampot with the co-operation of Kampot administration - provision of information - concerning:
 - General data: Population amount, settlement structure
 - Waste management specific data (country / city level): collection system, used treatment facilities / options incl. dumping, legislation / regulation, awareness campaigns etc.
 - Communication and/or contact person
- Development of a proposed draft scenario from KNOTEN WEIMAR perspective on basis of his expertise comparison to other draft scenarios if appropriate
- The presentation phase the workshop comprises:
 - -Presentation and discussion of structure and components of a western municipal solid waste management at the example of Germany
 - -Presentation of Kampot's present provincial/municipal/district solid waste management system and its components
 - -Presentation and discussion of draft scenario of Kampot solid waste management
 - -Identification of gaps and opportunities of Kampot's solid waste management

The following questions should be presented upon by Kampot province/ municipal/district representatives and other relevant stakeholders

A) Technical aspects

- Who is connected to the solid waste management system (e.g. use of maps)?
- Where is the SW collected and to which facility/ final site is it transported?
- Who is physically responsible for the collection of the SW?

B) Administrative aspects



- Who is administratively responsible for collection of Solid Waste and cleaning of the province/municipality/districts monitoring the collection / collection company and the disposal of waste?
- Who is responsible for public service Solid Waste management is one field of it on provincial and municipal and district level?
- What is the legal basis in Kampot province and Kampot municipality/ district for the management (collection, treatment, collection fee, contract preparation and agreement) of Solid Waste?
- What are the responsibilities of Kampot province/municipality/districts with regards to SWM?
- What is Kampot city able to do to provide and improve SWM?

C) Financial aspects

- Who is paying for waste collection and treatment to whom?
- Who is operating the provincial/municipal solid waste treatment and disposal facilities and who is paying for that?
- Which financial resources are available for SWM?

The follow-up phase comprises:

- Adaption of the proposed draft scenario of Kampot provincial/municipal solid waste management on the basis of the workshop discussions
- Resume of further preliminary measures for further activities → studies, technical drafts, planning etc.

4 Expected results

The expected results of the workshop in Kampot are:

- Awareness building of the city administration about the invisible issues and long term negative impact (hygiene, water pollution, soil pollution, etc.) of an inadequate municipal solid waste management
- Open and transparent discussion about Kampot's provincial/ municipal solid waste management and the proposed draft scenario to identify gaps and opportunities
- Adequate adaption of the proposed draft scenario
- Common elaborated measures for on-going activities
- Common generation of a status report
- Common development and generation of guidance, e.g. a priority list, check lists and feasibilities



5 Methodology

The workshop should consist methodically of several themed sessions whereas each comprises:

- Presentations, e.g. about the western waste management system and draft scenario for Kampot
- Discussion forums

The western solid waste management and/or the western perspective of a solid waste management system serve as reference scenario. The proposed adapted draft scenario should be the future target but may contain gaps compared to the reference scenario.

Kampot's present solid waste management will be compared to the proposed draft scenario. Commonly, the gaps and opportunities towards proposed draft scenario should be discussed.

A matrix comprising the different actors, operation levels and topics, see Figure 1, should structure and guide through the workshop and should help the participants to apperceive the contents. Each cell is an essential part of a solid waste management system. The more or less complete content and/or missing content should support the participants to identify gaps and opportunities of future solid waste management.

The comparison between the status quo and draft scenario identifies the way inclusive different steps that Kampot has to go for an adapted and adequate solid waste management system.



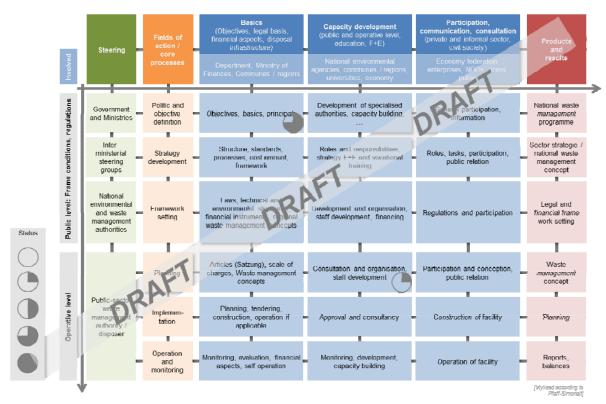


Figure 1: Schematic illustration of the topic to be discussed

Following themed sessions are proposed and incorporated in the schedule in Figure 1:

- [1] Essential components of a solid waste management from a western perspective, see figure 1, e.g. legislation, financing and awareness on different levels
- [2] Solid waste management in Kampot: Status quo incl. on-site excursion
- [3] Solid waste management in Germany: Status quo history, waste fractions and amount, collection and treatment
- [4] Presentation and discussion of the proposal of draft scenario
- [5] Identification of gaps and opportunities: What are the future tasks?
- [6] Identification of gaps and opportunities: Results

The presentations contain basic inform for the participants that build the basis for the subsequent discussions. At the beginning or end of each presentation an objective should be formulated. Within the discussions the set objective will be discussed. Thus, the duration of the presentation and discussion should be equal.



General structure:

A1): Provincial/Municipal solid waste management in Kampot Province/City/District—Status quo

A2): On-site excursion – Everybody should be aware by visiting

B1): Essential component of a western Solid Waste management system

B2): Solid Waste management in Germany: Implementation and example

C1): Presentation of a draft scenario from KNOTEN WEIMAR GmbH perspective (prepared by KNOTEN WEIMAR GmbH on the basis of its experiences)

C2): Discussion of the draft scenario

D): Results and next steps

Group discussion:

- What is helpful to achieving a proper solid waste management strengths (characteristics of the project that give it an advantage over others, e.g. an incineration plant is to expensive but local, people could part of a separate collection given that they participate): from an internal, means municipal/provincial point of view?
- What is harmful to achieving a proper solid waste management weaknesses (are characteristics that place the team at a disadvantage relative to others, e.g. well operating waste management concepts in other places/regions/countries): from an internal, means municipal/provincial point of view?

AND

- What is helpful to achieving a proper solid waste management opportunities (elements that the project could exploit to its advantage, e.g. existing regulations or financial resources): from an external, means e.g. national point of view?
- What is harmful to achieving a proper solid waste management threats (elements in the environment that could cause trouble, e.g. restriction from national level or missing space for a specific facility): from an external, means e.g. national point of view?



Day 1: Tuesday 26/11/13

Time	Activity	Organiser
07:30	Registration	KAS
07:45	Welcome Remarks by the Municipal Governor	Mr. Neak Sovannavi
08:00	Remarks by KAS	Mr. Denis Schrey
08:15	Opening Address by the Provincial Deputy	H.E. Sautr Yea
	Governor	
08:30-	Outline:	
12:00	Essential components of solid waste manage-	
	ment in Kampot Province and Municipality;	
	Status Quo	
	30 minute presentations	
	15 minute Q&A	
08:30	Presentation: Provincial Update/Overview	Mr. Souy Thea
	Technical Aspects: Types/Amount/Sources of	Director of Depart-
	waste produced, current methods of waste	ment of Environment,
	collection, separation, treatment and facilities	Kampot Province
	in Kampot Province. Map overview of SWM in	
	Kampot Province to include serviced areas,	
	collection points, facilities and final dumpsites.	
	Legislative Aspects: An overview of SWM	
	regulation and legislation in Kampot Province.	
09:00	Clarification Q&A	Mr. Prak Munny
09:15	Presentation: Legislative Aspects	Neak Sovannavi
	Current roles and responsibilities of the Mu-	Municipal Governor
	nicipality, District, Sangkat and Councils in	and Head of Waste
	SWM in Kampot Municipality. Identify who is	Management in Kam-
	responsible for public service, including SWM,	pot Municipality
	at the municipal level. Identify who is admin-	OR
	istratively and physically responsible for col-	Chem Pha
	lection and disposal of SW and cleaning the	Deputy District Gov-
	city.	ernor
09:45-	Clarification Q&A	Mr. Prak Munny
10:00		
10:00	Coffee Break	KAS



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10:30	Presentation: Contracting Aspects	Neak Sovannavi
	Contractual Modalities (detailed Provisions in	Municipal Governor
	the Contract) between the Provincial Authority	and Head of Waste
	and the service provider (GAEA). Discover	Management in Kam-
	what monitoring role the local authority has	pot Municipality
	over the collection company and the disposal	OR
	of waste	Chem Pha
		Deputy District Gov-
		ernor
11:00	Clarification Q&A	Mr. Prak Munny
11:15	Presentation: Financial Aspects	Neak Sovannavi
	Fee collection system (coverage, payment and	Municipal Governor
	collection methods, use of revenue from fee	and Head of Waste
	collection, legislation and legal enforcement to	Management in Kam-
	sanction refusal to pay fees?). Current fund-	pot Municipality
	ing mechanisms for waste management in	OR
	Kampot Province	Chem Pha
		Deputy District Gov-
		ernor
11:45-	Clarification Q&A	Mr. Prak Munny
12:00		
12:00	Lunch	KAS



14:00-	Outline:	
17:00	Essential components of SWM using the ex-	
	ample of Germany; Status Quo	
	60 minute presentations	
	30 minute Q&A	
14:00	Presentation:	Technical Expert Gun-
	Essential theoretical components of SWM,	nar Haedrich
	such as: Legislation, financing, technical and	
	capacity building aspects, refer to figure 1	
15:00	Clarification Q&A	Mr. Prak Munny
15:30	Presentation:	Technical Expert Gun-
	A practical example of municipal solid waste	nar Haedrich
	management in Germany – legislation, finan-	
	cial aspects, implementation (current system:	
	waste collection, separation, treatment and	
	facilities)	
16:30	Clarification Q&A	Mr. Prak Munny
17:00-	SWOT Analysis Explained: Field trip detailed	
17:15	and focus group discussion/presentation task	
	outlined.	



Day 2: Wednesday 27/11/13

Time	Activity	Organiser
08:00-	Field Trip:	Neak Sovannavi
10:00	On-site excursion (from the generation of	
	waste, to the collection to disposal points)?	
	To include composting site as final destina-	
	tion.	
10:00-	Focus Group Discussion:	4 Facilitators:
12:00	Brainstorm and identify the strengths, chal-	2: COMPED
	lenges and opportunities (SWOT-Analysis) for	- Mr. Sam Phalla
	Kampot Waste Management, based on the	- Mr. Uch Rithy
	experiences gained from;	1: Prak Muny
	Day 1 Kampot Status Quo	1: KAS
	Day 1 German Status Quo	
	Day 2 Morning Field Trip	
	4 groups focussing on	
	A) Types/Amount/Sources of waste produced,	
	current methods of waste collection, separa-	
	tion, treatment and facilities in Kampot	
	B) Roles and Responsibilities of Different Ad-	
	ministrative Levels and the Service Provider	
	C) Legislation and Contracts	
	D) Funding and Fee Collection	
12:00	Lunch	KAS



14:00	Presentation of the 4 Focus Group Discussions	Moderated by
	of the identified strengths, challenges and op-	Mr. Gunnar Haedrich
	portunities for Kampot Waste Management	& Mr. Prak Munny
15:00-	Outline:	
17:00	What are the future tasks for SWM in Kampot:	
	Different approaches presented in a Draft	
	Scenario – (I) Legislation and (II) Contract	
	30 minute presentations	
	30 minute discussions	
15:00	Presentation:	Technical Expert
	Draft Scenario (I) Legislation: roles and re-	Gunnar Haedrich
	sponsibilities of the Province, Municipality,	
	District, Sangkat Administration and Councils	
	in waste management in Kampot	
15:30	Discussion of legislation draft scenario	Mr. Prak Munny
16:00	Presentation:	Technical Expert
	Draft Scenario (II) Contract: as much as pos-	Gunnar Haedrich
	sible transparent contractual modalities be-	
	tween the provincial authority and the service	
	provider	
16:30-	Discussion of contract draft scenario	Mr. Prak Munny
17:00		
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Day 3: Thursday 28/11/13

Date	Activity	Organiser
08:00-	Outline:	
12:00	What are the future tasks for SWM in Kampot:	
	Different approaches presented in a Draft	
	Scenario – (III) Financial and (IV) Technical	
	45 minute presentations	
	45 minute discussions	
08:00	Presentation:	Technical Expert
	Draft Scenario (III) Finance: transparent fee	Gunnar Haedrich
	collection system (coverage, payment and	
	collection methods, use of revenue from fee	
	collection, legislation and legal enforcement to	
	sanction refusal to pay fees)	
08:45	Discussion of finance draft scenario	Mr. Prak Munny
	WHAT IS FEASIBLE/ FINANCEABLE?	
09:30	Presentation:	Technical Expert
	Draft Scenario (IV) Technical Aspects: waste	Gunnar Haedrich
	collection, separation, treatment and facilities	
	in Kampot → priority is on emission reduction	
	and closed cycle	
10:15	Discussion of technical aspects in draft sce-	Mr. Prak Munny
	nario	
	WHAT IS FEASIBLE/ FINANCEABLE?	
11:00	Summary of Full Draft Scenario: Legislation,	Technical Expert
	Contract, Financial and Technical	Gunnar Haedrich
11:30	Discussion of Full Draft Scenario	Mr. Prak Munny
12:00	Lunch	KAS



14:00-	Outline:	
17:00	Results and guidelines for further processing	
	(checklists, priority list, feasibilities)	
	10 minute input presentations	
	30 minute collaborative discussions	
14:00	Presentation:	Technical Expert
	Legislative recommendations	Gunnar Haedrich
14:10	Discussion on legislation:	Mr. Prak Munny
	Participant collaboration in developing the	,
	next steps (e.g. checklists, priority lists, fea-	
	sibilities)	
14:40	Presentation:	Technical Expert
	Contractual recommendations	Gunnar Haedrich
14:50	Discussion on contract:	Mr. Prak Munny
	Participant collaboration in developing the	,
	next steps (e.g. checklists, priority lists, fea-	
	sibilities)	
15:20	Presentation:	Technical Expert
	Financial recommendations	Gunnar Haedrich
15:30	Discussion on finance:	Mr. Prak Munny
	Participant collaboration in developing the	
	next steps (e.g. checklists, priority lists, fea-	
	sibilities)	
16:00	Presentation:	Technical Expert
	Technical recommendations	Gunnar Haedrich
16:10	Discussion on technical support:	Mr. Prak Munny
	Participant collaboration in developing the	
	next steps (e.g. checklists, priority lists, fea-	
	sibilities)	
16:40	Report of the three-day workshop	Mr. Neak Sovannary
		or Mr. Chem Pha
	Remarks by KAS	Mr. Denis Schrey
	Closing remarks by Ministry of Interior	H.E. Leng Vy, Under-
		Secretary of State,
		MoI (TBC)
17:30	End of Workshop	KAS