

KINGDOM OF CAMBODIA
Nation Religion King

SUMMARY REPORT

**PRTR Training Sessions and National Workshop on
Drafting National Executive Proposal and Practical Uses and
Dissemination Strategies of PRTR Data**

15 March, 2017, at Cambodia Korea Cooperation Centre (CKCC) / RUPP, Phnom Penh



MINISTRY OF ENVIRONMENT

May 2017



MoE



GEF



UNITAR

Project Coordination Unit

Phase 2 PRTR Project: Dept. of Hazardous Substances Management, General Directorate of Environmental Protection

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Picture of Honorable



Photo from left: Mr. Jorge Ocana, UNITAR, Mr. Chea Sina, Deputy Director General, EPA, Mr. Thol Chanthan, Director of DHSM, Ministry of Environment



Group photo and all Stakeholders : Participants from all different stakeholders attended the inception workshop

INTRODUCTION

1. The National Executive Proposal and Strategies for Public Access to Environmental Information and PRTRs began on 15 March, 2017 at Cambodia Korea Cooperation Center (CKCC), Royal University Phnom Penh (RUPP). The workshop was organized throughout the day by Phase 2 PRTR Project Coordination Unit (PCU), the Department of Hazardous Substances Management (DHSM), General Directorate of Environmental Protection (EAP), Ministry of Environment (MOE) with technical support provided by UNITAR. There were 65 participants from different stakeholders included UNITAR experts, and from the governmental institutions, academia, private sectors (factories), non-governmental organization (NGOs) participated in the workshop (*Agenda and list of participants are attached in Annex 1 and 2*);
2. The main purposes of this nation workshop are:
 - To present the progress of outputs of project implementation;
 - To Review, comment and feedback on the draft executive proposal document by all stakeholders;
 - To guide to the practical uses and dissemination strategies of PRTR data.
3. The speaker of the workshop are :
 - Mr. Jorge OCANA, Manager on Chemicals and Waste Management Programme, UNITAR;
 - Mr. Uong Sokunthea National Project Coordinator (NPC);
 - Mr. Roath Sith, National Consultant for Executive Proposal Development, Ministry of Environment,
 - Mr. Andrea CARARO, International Expert, UNITAR.

OPENING SESSION

4. In getting start, **Ms. Meas Sokun**, a master ceremony (MC), welcome honorable, national and international experts, participants and introduced briefly the agenda and objective of the workshop and followed by national anthem.

OPEN REMARK BY UNITAR and CHAIRPERSON

5. The open speech was firstly delivered by **Mr. Jorge Ocana** , he expressed his sincerely thanks to Mr. Sina chair person of the workshop and also to all participants. As he said it was his great pleasure to come to Cambodia as it is the first time for him and he thought that it was very important event that all participants from different stakeholders were attended. He said that this workshop would be contributed very much to the PRTR designed through sharing his long time experiences with PRTR related issues and he and UNITAR are ready to assist Cambodia to make the PRTR project move forward successfully. Following by Mr. Jorge Ocana, it was open speech made by **Mr. Chea Sina**, Deputy Director General of Environmental Protection, Ministry of Environment;
6. As in his speech, he presided briefly within his remark to delegate and participant as follows:

- Expression of his thanks to **Mr. Jorge OCANA** and **Mr. Andrea CARARO**, UNITAR's expert, and welcomed to distinguish delegates and participants from different concerned parties (*government, academia, private sector, and NGO*) to attended the above captioned workshop . He also expressed his sincerely thanks to the UNEP and GEF for technical assistance and financial support for Cambodia to implementation of the Phase 2 PRTR project;
- In his speech, he mentioned that the growth of chemical production and consumption have put a big concern for our human life because the production and consumption activities has left with hazardous substance and waste into environment (water, air, and soil) via emission such as wind blowing, spilling, leaking or via the movement of the waste transportation. Consequently, it could pollute the surrounded environment, which cause transmission to our food such as fish, meat, and vegetable and it cause harmful effect to our health, as well as animals who consume the food;
- In order to prevent and mitigate those impact mentioned above, he addressed that many countries have determined a goal for environmental policy that is to protect human, animal, and environment to avoid the bad impact of the pollution and to protect the natural resource as well energy. Moreover, this policy also determines the protection method to prevent the pollutant release and chemical as well as hazardous waste transfer into environment, which is the most prioritized action plan for the goal of policy above. At the same time, to successfully protect the environment, many countries have included the public participation program as a part the environmental policy meaning that public people have to receive the information about pollutant release and transfer through the implementation of PRTR system as stated in RIO international agreement resolution in 1992 in principal 10 of agenda 21, cited that "each individual shall have appropriate access to information concerning the environment and the opportunity to participate in decision-making processes. Also, each country shall encourage public awareness a participation by making information widely available." Furthermore, in the agenda 21 also determine that industrial sector shall provide input substance data for production to be used for the assessment of danger and give that information to the public;
- To response the above target and in order to help Cambodia to fulfill its obligation to implement the Stockholm Convention on POPs which are the preparation of the national report on POPs and the response to the principle in Agenda 21 about the right of the public to access to information about the impact of chemical substance in order to guarantee an environmental sound management of it, Cambodia has been chosen to be a part of implementation PRTP system project phase II with other 6 countries under the financial support from GEF facilitated by UNITAR and implemented by the Department of Hazardous Substance Management in General Directorate of Environmental Protection of Ministry of Environment;
- He added and informed the workshop that the PRTR system Project Phase II has been started since May in 2016. So far this project has achieved a lot of things such as (1).Forming project implementation sector and team, (2). Updating the technical inter-ministry members, (3). Conducted dissemination workshop on project implementation, (4). Updating the report about National Executive Proposal and prepare a national strategy for PRTR. In order to make a better and valid

updated of national executive proposal to prepare of national strategy for PRTR system as mentioned in project activity above, that is why DHSM, who is a project implementation agency, is conducting a national consultation workshop today and request your Excellency, lady and gentlemen, and all representative from academic institute, private sector, and all NGOs to actively provide comments and supports to make the today workshop be successful;

- Last but not least, he once again, on behalf of MOE, he expressed his profound gratitude to Excellency, lady, gentlemen, and all representative from all stakeholders and sectors that provide good cooperation with MoE, and highly evaluate the presence of **Mr. Jorge Ocana**, and **Mr. Andrea CARARO**, who are the experts that attend the workshop to present and participate and facilitate in session, and discussion in this workshop;
- Finally, he wishes all participants and international guests all the best, and he hope that today workshop will be successful. On behalf of Ministry of Environment, with highly approval from His **Excellency Say Samal**, Minister of Ministry of Environment, he has announced the opening of the workshop;
- At the end of opening speech session by honourable, a group photo was taken (*see : other photo in Annex 3*);

WORKSHOP ACTIVITIES

a) Presentations

7. The first presentation was made by **Mr. Jorge OCANA**, UNITAR on **Pollutant Release and Transfer Register (PRTR)**. Firstly he explained what is the PRTR? how does it work? what is its benefit? and what and how is the process of PRTR designed (key stage) ? Concerning what is PRTR? it refers to a catalogue or database of releases and transfers of potentially harmful chemicals including information on the nature and quantity of such releases and transfers. The data for PRTRs can be collected from point sources of pollution, such as factories, as well as from diffuse sources, such as agricultural operations or transportation activities. A PRTR usually covers releases to air (air emission CH4, CO2,..etc), water (Cr, H2SO4,etc) and land (PCBs, DDT,etc) as well as wastes transported to treatment and disposal sites. In term of how does it work? this will work to identified the pollution sources and its release into environmental media such as air, soil and water and analysis data before distributing to user;
8. In term of PRTR benefit, Mr. Jorge explained that if the PRTR system available, then this will be benefited to 1) Governments, 2) Industry, and 3) Public;
9. In term of the key stage of PRTR system designing he mentioned that there are 6 stages are start making planning and following by identifying objective of the system, conduct infrastructure assessment, design general characteristic, conduct a pilot study and lastly is to develop national executive proposal that are those is in the first phase of the project;
10. In order to achieve the above designing process, there are key elements that need to be considered such as the preparation of mechanism for possible project organization, take into account on the high level support, rectification of Kiev protocol which help a faster for PRTR implementation in the country, linking PRTR to national priority and agenda will secure political support, good interaction between national

coordinator and main industrial stakeholders, and provision of PRTR reporting guidance/training to industrial facilities;

11. At the last of his slide, he mentioned about the lesson learned which can be move forward on the effectiveness of PRTR implementation include the inclusion of all concerned stakeholders since the inception of the project, a mandatory PRTR is likely to be more successful than voluntary scheme, self-reporting from facility should be done electronically, need to set up clear requirements on confidentiality of data claimed by reporting facilities, and a strong awareness raising campaign is proven to be effective in setting up a PRTR;
12. Following presentation made by Mr. Jorge, the was a presentation given by National Coordinator, **Mr. Uong Sokunthea** on **Progress and implementation of PRTR Project** (*history and project implementation, its achievements, and move forward activities*). At his beginning, Mr. Uong has repeated to participants on the history of the first project on PRTR by emphasized that Cambodia was selected one among of the 32 countries to 2 year project implementation since 2009. The main objective of this project was helped Cambodia to the success of national PRTR system establishment, to enhance the value environmental quality management toward the reducing of harmful potentially to human and environment causes by releasing and transferring pollutant (*hazardous chemicals and waste*), the availability of information/data on chemical and chemicals that need to be controlled, tracked, and reported, and capability to identify pollution sources, scale of pollution in environmental media (water, air, soil).. etc.

After he informed all participants about the project's background, then he given the achievements of the first project included: 1) National PRTR Infrastructure Assessment (*the Existing Legal, Regulatory, Institutional, Administrative, Technical, Infrastructure and Available National Expertise*), 2) Key Features of a National PRTR System (*Cambodia Pollutant Release and Transfer Register PRTR System*), 3) Cambodia Report on PRTR Pilot Trial, 4) Strategy Plan for PRTR Dissemination and Awareness Raising in Different Sectors, and 5) Cambodia National Executive Proposal on PRTR;

13. In additional to the above first project, Mr. Uong added that it was a greatest opportunity that Cambodia was once again selected to joint the second phase (phase 2) PRTR project which starting in 2015 with technical assistance supported by UNITAR and financial by GEF. The project consisted of six key components as the following :
 - Com-1 : Project baseline strengthened and national needs identified;
 - Com-2 : Implementing PRTRs as national POPs and chemicals reporting systems;
 - Com-3 : Standardization and comparison of PRTR data;
 - Com-4 : Access to PRTR data and dissemination of information;
 - Com-5 : Identifying lessons learned.
14. Concerning phase 2 project, progress of the project implementation are : a) Established National Project Coordination Unit (PCU), b) Developed detail workplan and budget for project implementation, c) Updated list of national coordination committee (NCC), d) Organized inception workshop officially announce the project launching at the country level, Updated national executive proposal (still ongoing);
15. Further more, the next activities are moving forward such as ongoing activities include: identified national consultants to develop national strategy and legislation for PRTR implementation and future activities will develop online module and training to trainer (TOT) for government officers on the estimation technique communication and

planning for industry on estimation techniques and the reporting and for civil society responsible use of data, participation and NGO. Other will consider on national guidance for estimation technique and pilot trail to use method to calculate the release from other sources;

16. Last of his presentation he showed the workplan for development of standard for comparing and monitoring and evaluation and final audit;
17. After Mr. Uong presentation it was presentation given by **Mr. Roath Sith**, National Consultant and Deputy Director General of Information and Education, MOE. The key points were summarized from the outline are :Introduction, Objectives of the National PRTR System, Legal Implementation of the National PRTR System, Reporting requirements and procedure for point source emission, Treatment of non-point and non-reporting point sources of emission, PRTR data management system, Administration of the national PRTR system, and Appendices;
18. In term of introduction, he given on Cambodia Rational on Pollutant Release and Transfer Register, the PRTR's role in the unified Environmental Database (ED) and Public Participation. Concerning the objective of the national PRTR system he addressed the overall goals of PRTR, overall objectives of PRTR, then following the new or existing regulations and legislation under which the PRTR system will operate, schedule for development of the requisite legislation, current environmental data reporting requirements to be replaced, modified, or integrated with the PRTR reporting scheme;
19. In term of reporting requirements and procedures for point sources of emissions, he explained the definition of technical term , list of substances subject to PRTR reporting, procedures for reviewing, adding, or deleting substances from the PRTR list, criteria and thresholds that trigger PRTR reporting by facilities/ emissions sources, facilities or sources exempted from PRTR reporting, management of confidentiality claims, data elements to be included in the reporting format, emissions estimation methods. Addition to this, he mention to the treatment of non-point and non-reporting point sources of emissions (*definitions of non-point, diffuse, and non-reporting sources, procedures for estimating emissions/releases from non-point, diffuse, or non reporting point sources, procedures and format for including these emissions estimates in the general PRTR database*), PRTR data management system (*software requirements and specifications for the PRTR system, hardware requirements and configuration for the PRTR system reporting format*), Administration of the national PRTR system (*institutional responsibilities for data collection and management, institutional responsibilities for data analysis and dissemination*) and then the appendix;
20. After Mr. Roath presentation, it was a presentation on **Strategies for Data Dissemination and Public Access to PRTR Information**. The outline of his presentation focus on the key questions provided to the integral part of the PRTR process. He mentioned that the dissemination of PRTRs data is a powerful tool for communicating information about the environment for the government, industry, and the public all benefit from the PRTR data, presenting the key factor for PRTR awareness raising include national governments, industries, academia, state/provinces, regional inter-governmental bodies, local communities, non-governmental organizations (NGOs). In order to develop a dissemination and presentation strategy, there should be number questions given and those are: what are the PRTR's goals? who are the audiences? What do the audiences need? what data are to be disseminated, e.g. full sets of reported data, aggregated data, data sorted by different themes or topics? How are data to be disseminated? Which media will be used, e.g. paper (summary reports, factsheets, special reports), or electronic

(Internet, CD-ROM)? How data can be presented so that all levels of affected and interested parties can easily understand them? what context data are needed (geography, economic, production volume, etc.)?,etc;

21. In term of what are the PRTR's goals, these will cover the fulfilling the public's right-to-know; identifying opportunities and encouraging pollution prevention; encouraging cleaner production; improving public participation in environmental policy decision-making; identifying areas for action (e.g. hot spots of pollution or of a "specific" chemical) and setting priorities; measuring progress toward environment goals and policy objectives; monitoring policy performance; and improving the public's understanding of environmental issues;
22. Following by who are the audiences? there is a great variety of users of PRTR data, ranging from all levels of government to the general public: policy-makers (*i.e. Governments*), individual facilities, industry groups, firms professional and industries associations, investors, suppliers and consumers, local communities, educational institutions, civil society (*e.g. NGOs, environmental citizens' organizations*). In term of What do PRTR audiences need?, it will identify information needs in consultation with potential audiences or users summary data and presentations that emphasize overall trends and progresses made broader audiences, detailed subsets of the data or complete raw data, industries analysis of aggregate PRTR data (*specific substances and group of substances, performance of particular environmental policies, performance by industrial sectors or geographical distribution*), policy-makers focus on potential risk for health problems, particular industries or locality, NGOs, public academia and research organizations working on risk screening use PRTR data for a range of activities, including as an input into different models;
23. Mr. Andrea has continued to other question on what data are to be disseminated? he explained that data disseminated are referred to identify information needs in consultation with potential audiences or users, summary data and presentations that emphasize overall trends and progresses made Broader audiences, detailed subsets of the data or complete raw data, Industries, Analysis of aggregate PRTR data (*specific substances and group of substances, performance of particular environmental policies, performance by industrial sectors or geographical distribution*), policy-makers, focus on potential risk for health problems, particular industries or locality NGOs, public, academia and research organizations working on risk screening use PRTR data for a range of activities, including as an input into different models
24. In term of what context data or information are needed? this is one of the key element for the PRTR system which this focus on external information include: geography, ecology, toxicity and hazard of listed chemicals, demographics, economics, and other types of information; economic data enhance PRTR analyses by business sector; demographic data assist in priority-setting and decision-making processes; Local community contexts, e.g. school locations, information on sewage and water treatment capabilities, etc.; chemical/physical properties, health and environmental effects, and information on the fate and transport of a substance in the environment; information on common uses of reportable substances, their role in industrial processes, and their likely presence in products. He said that the tool to enhance presentations and dissemination are: marketing, web-sites, trainings, publicity, academia, outreach materials, education, newspapers, national news, workshop, and conferences;
25. At his last presentation came with the conclusion as he addressed with the following:
 - Inform the public that the PRTR data exist,
 - Ensure easy public access,
 - Provide information, education and training concerning the meaning and use of the data,

- Challenges which will move forward to accuracy and timeliness, providing context and training, building links with related data.
26. Before came to the closing session, there were number of question from participants to the speakers and answer were given to those questions. The participants have learned a lot from national and international experts on the key concept of PRTR designing, understanding on the PRTR which is very important tool for the compliance for the environmental controlling, monitoring environmental pollution;
27. During the closing, **Mr. Jorge OCANA** on behalf of UNITAR has expressed his thank to MOE and all participants for the actively participated and said UNITAR is remaining to assist Cambodia at any time to achieve in the development of PRTR system designing in term of technical and capacity building development; then
28. **Mr. Phet Pichhara**, Deputy Director of Hazardous Substances Management Department, MOE expressing his appreciation to the outcome of workshops and also express his sincere thanks to Mr. Jorger Ocana and Mr. Andrea Cararo for providing lecturing and sharing their experiences to all participants and extended his thanks to all concerned parties for their participation;
29. The workshop was closed at the afternoon of 15th March 2017 at 17:00 p.m with harmonic environment.

ANNEXS

Annex 1

AGENDA
National Conductive Workshop
**PRTR Training Sessions and National Workshop on Drafting National Executive
Proposal and Practical Uses and Dissemination Strategies of PRTR Data**
15 March , 2017, at CKCC, Royal University of Phnom Penh

Time	Activities	Speaker
08.00 – 08.45	Registration of participants	
08.45– 09.00	Opening Session Introduction to the workshop & national anthem Opening remarks by UNITAR	<i>Ms. Meas Sokun, MC</i> <i>Mr. Jorge OCANA, UNITAR</i>
	Opening speech	<i>Mr. Chea Sina, Deputy Director General, MOE</i>
	Group Photo	
09.00 – 09.20	Coffee Break	
09.20 – 10.10	Basic principles of PRTR systems	<i>Mr. Jorge OCANA, UNITAR</i>
10.10– 11.00	Progress and implementation of PRTR Project Question/answer	<i>Mr. Uong Sokunthea National Coordinator</i>
11.00 – 12.00	Updated National Executive Proposal report Question/answer	<i>Mr. Roath Sith National Consultant</i>
	Discussion on the updated National Executive Proposal	<i>All Participants</i>
12.30-13.30	Lunch	
13.30-14.00	Practical uses of PRTRs and discussion on National strategies to disseminate PRTR data	<i>All Participants</i>
14.00 – 15.00	PRTRs and Mercury as integrated reporting systems Question/answer	<i>Mr. Andrea CARARO, UNITAR</i>
15.00 – 15.20	Closing	MOE

Annex 2**List of Participants**On 15 March 2017, At Cambodia-Korea Cooperation Center (CKCC), RUPP

No.	Name	Position/Organization	Tel and Email Address
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13	Ms. Thorn Kimlay	Ministry of Environment Officer	Tel: 085 338 853 Email:
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59	Mr. Lao Kimchhy	Ministry of environment	Tel: 011253377 Email:
60	Ms. Meas Sokun	Ministry of Environment (MC) Chief Office	Tel: 0963363737 Email: sk.sokun@ymail.com
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Annex 3

Photos of the Workshop (photos taken during the meeting and workshop)



Registration of participants and UNITAR experts in the morning on 15 March, 2017 at CKCC,RUPP



Honorable of the workshop Mr. Jorge OCANA, UNITAR and Mr. Chea Sina during their delivered welcome remark to the workshop



Workshop's activities



Presentations given by national and international experts to workshops



Participants to the National Consultive Workshop

All participants and project's staffs during the workshop at CKCC, RUPP



សុទ្ធខ័ណ្ឌ

លោក ជា សីណា អគ្គនាយកដៃនៃអគ្គនាយកដ្ឋានគំពារហិរញ្ញន ក្រសួងបរិស្ថានភូមិដីបៀកសីភាពិតិគ្រោះយោបល់ ស្តីពី កម្មវិធីប្រតិបត្តិខ្លាក់ជាតិ និងការរៀបចំយុទ្ធសាស្ត្រជាតិភូមិការផ្សេចផ្សាយប្រព័ន្ធឌីឡូនីយសាធារកុបំពលដែលសាយកាយ និងបំណាស់ទី (PRTR) ថ្ងៃទី ១៥ ខែមីនា ឆ្នាំ២០១៧
មជ្ឈមណ្ឌលកិច្ចសហប្រតិបត្តិការកម្មជាក្នុង

- សូមស្តាគមនី **Jorge Ocana** ទីប្រើក្រុងផ្នែកប្រព័ន្ធឌីឡូនីយ PRTR របស់ UNITAR
 - លោក **Andrea CARARO** ប្រធានគ្រប់គ្រងផ្នែកតីមី និងសារធាតុ POPs របស់ UNEP-DTIE
 - សូមគោរពស្តាគមនីងកខត្តម លោក លោកស្រី អ្នកជំនាញសង្គម និងគំណាងមកពីក្រសួង និងស្ថាបនពាក់ពីនឹងលប់ចូលរួមទាំងអស់ជាមីមេត្រី

ឯកឧត្តម លោក-លោកស្រី ក្រោដ្ឋាតិ អនុក្រោដ្ឋាតិ និងកំណងចូលរួមទាំងអស់ជីវប៉ាន់!

ទេនឹងបរិស្ថាន និងមានចិត្តកាសចូលរួមក្នុងដំណើរការធ្វើសេចក្តីសម្របចិត្តនានា ហើយដែលប្រទេសទាំងអស់ត្រូវលើកកម្មសំយល់ដើម្បីនិងការចូលរួមជាសាធារណៈ តាមរយៈការផ្តល់ព័ត៌មានឌីតានទូលំទូលាយតាមដែលអាចទទួលបាន និងប្រើប្រាស់នៅក្នុងរបៀបវារៈ ២១ កំណត់ថាទីផ្លូវខស្សាបកម្ពុជ្រើនដូលទិន្នន័យសារធាតុដែលជាបិតសម្រាប់ប្រើប្រាស់ក្នុងការរាយឡើពីភាពបង្កគ្រោះថ្នាក់ និងត្រូវផ្តល់ទេនឹងសាធារណៈជន។
ឯកឧត្តម លោក-លោកស្រី ត្រូវដោតិ អនុដោតិ និងតំណាងចូលរួមទាំងអស់ជានីកប់អាន !

ជាបីមួនទៀត តាងនាមឱ្យក្រសងបិស្សាន ខ្ញុំសូមថ្លែងអំណារគុណដល់ការខ្ចោម លោក លោកស្រី តាំណាងចូលរួមដែលអាចធ្វើឡើងការប្រគល់ស្ថាប័ន និងផ្តល់ការពាក់ព័ន្ធទាំងអស់ តុងការចូលរួមដល់កិច្ចសហការលួដីមួយក្រសងបិស្សាន ហើយកសូមរាយកម្មឈានដល់វគ្គមាន លោក Jorge Ocana និងលោក Andrea CARARO ដោអូកនុវត្តន៍ដែលបានអាចធ្វើឡើងខ្លួនដល់វគ្គមាន និងចូលរួមពីការក្រុមក្នុងសិក្សាសាលាពីគ្រោះយោបល់ថ្មាក់ជាគិត្យាដើរៈ។

ជាតិបញ្ចប់ ខ្លួនដែលចងកខត្តម ហេក ហេកស្រី ក្រុងជាតិ អន្តរជាតិ និងគំណងចូលរួមទាំងអស់ សូមជួយប្រទេស សេចក្តីសុខ និងចំពើនគ្មេប្រការ និងសូមប្រសិទ្ធពរាយអង្គភាពសាលានៃថ្ងៃនេះប្រព្រឹត្តទៅប្រកប ដោយជាតិជំយ និងតាងនាមឱ្យក្រសួងបរិស្ថាន ដោយទទួលបានការអនុញ្ញាតដីខ្លួន និង ឯកខត្តម សាយ សំអាល់ រដ្ឋមន្ត្រីក្រសួងបរិស្ថាន ដូចនេះខ្លួន អនុញ្ញាត ប្រកាសបើកសិក្សាសាលជាតិ បាប់ពីពេលនេះតាមទៅ។

សូមអរគុណ!

Annex 5 : P resentaton Documents

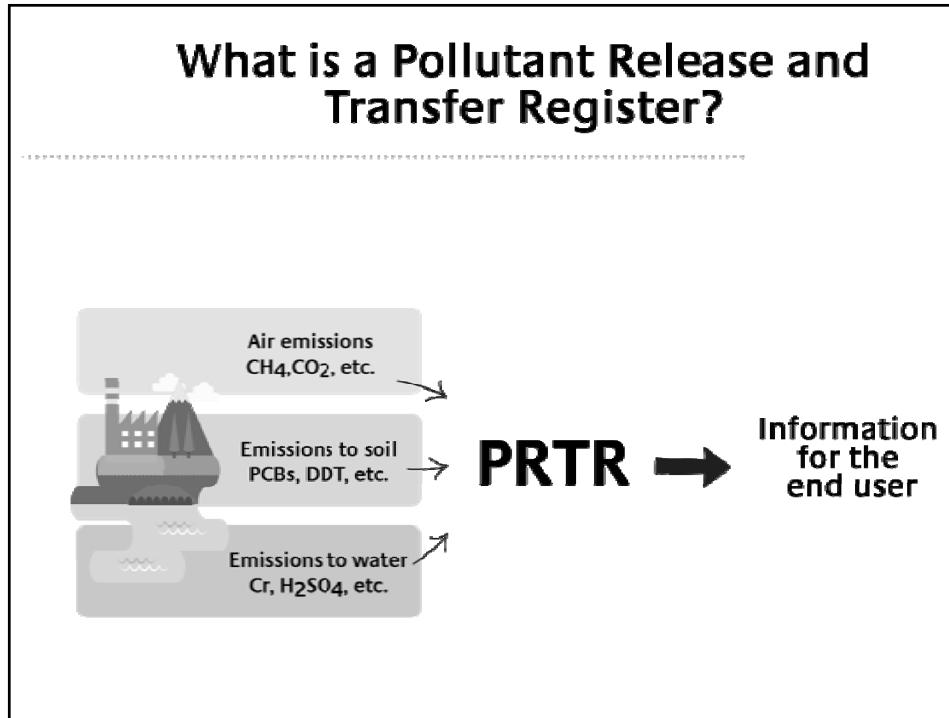
Annex 5: Mr. Jorge OCANA's Presentation

 United Nations Institute for Training and Research

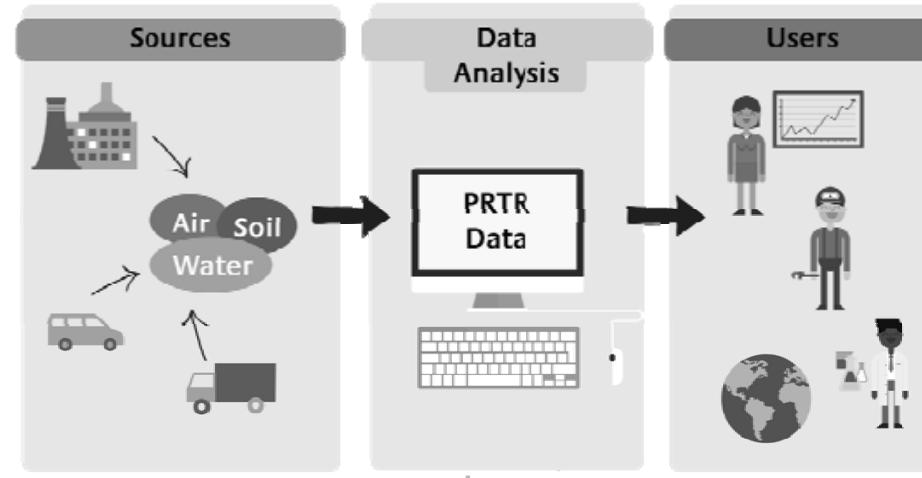
Pollutant Release and Transfer Registers

PRTRs

Basic Information



How does a PRTR work?



From inventories on a single environment to PRTRs

Change from **command-control** policy
to a **participatory process**.



Multimedia information brings
a better picture of the **environmental status**
and allows to take **informed decisions**



Possible objectives of a PRTR

- Foresee tendency for emissions
- Identify priority areas and sectors
- Identify hot spots
- Obtain information to take action



Benefits of PRTRs



Governments



Industry



Public

Governments

- Establish **national priorities** and promote a **participatory** environmental management system
- Identify **priority areas**
- Reach **environmental targets**
- Identify and reduce **risks** posed by chemicals
- Comply with **international MEAs**

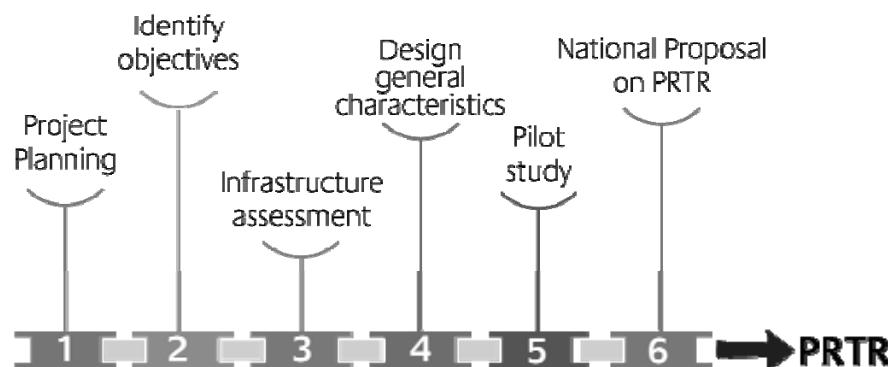
Industry

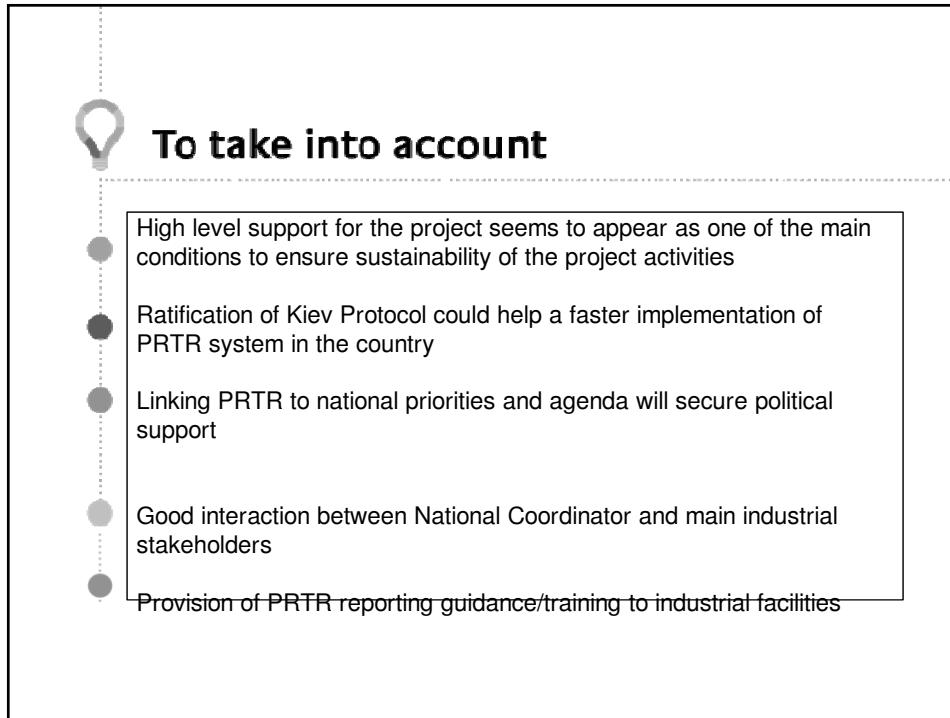
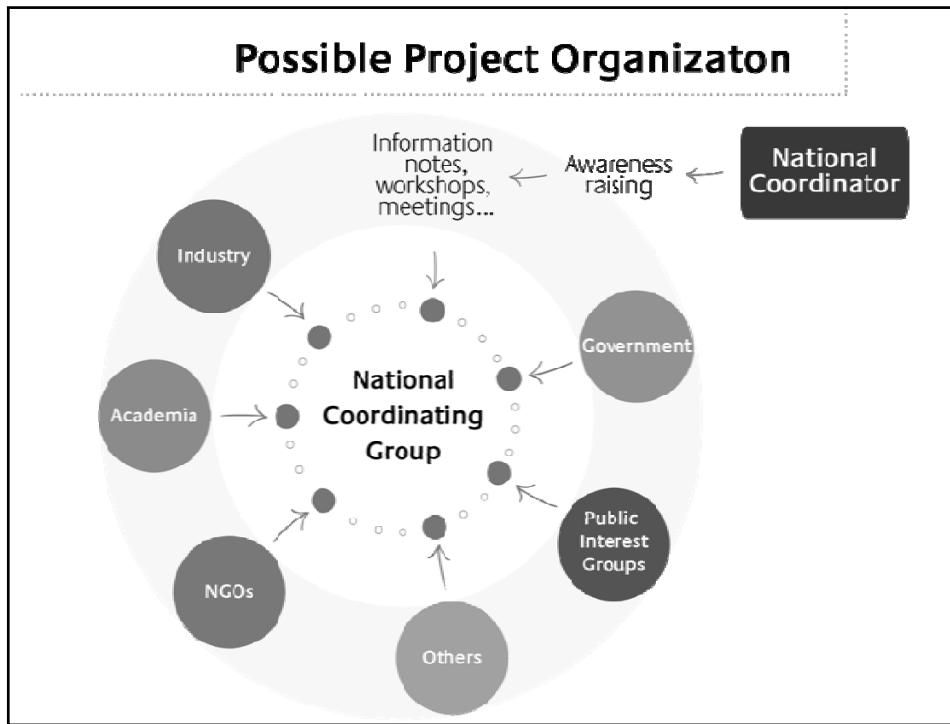
- Promote **pollution prevention** programmes
- Identify issues with **industrial processes**, opportunities for **cleaner production** and more **cost efficient processes**
- Opportunity to work with the community to improve **environmental conditions**
- Be competitive in the **world market**

Public

- More **awareness** on risks posed by chemicals
- Informed participation in **environmental management**
- Information available for the **emergency response groups**
- Information available for **educational purposes**

Key stages in the design of a PRTR system







Lessons Learned

- Inclusion of all concerned stakeholders since the inception of the project is key for success
- A mandatory PRTR is likely to be more successful than a voluntary scheme
- Self-reporting from facilities should be done electronically
- The designated national authority is in charge of the quality control of reported data → 'spot check'
- Needs to set-up clear requirements on "confidentiality" of data claimed by reporting facilities
- A strong awareness raising campaign is proven to be effective in setting up a PRTR

UNITAR Programme on PRTR Capacity Building



Guidance Materials



CD-ROM on PRTRs



Experiences from other countries



PRTR Platform



Technical assistance to support the development of PRTRs



Technical network of experts

Thank you!



United Nations Institute for Training and Research
Institut des Nations Unies pour la Formation et la Recherche
Instituto de las Naciones Unidas para Formación Profesional e Investigaciones
Учебный и научно-исследовательский институт
Организации Объединенных Наций
مَعْدِلُ الْأَمْمَ الْمُتَّحِدَةِ لِلتَّدْرِيبِ وَالْجَسْدَ

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Annex 5: Mr. Uong Sokunthea's Presentation

សំគាល់និងចារការពីប្រព័ន្ធមេន្ត្រូវការ និងការរៀបចំប្រព័ន្ធ
សារពិភ័ណ៌នាសាស្ត្រទៅការបង្កើតរឿងរាយការពីប្រព័ន្ធនៃជាតិ និងការរៀបចំប្រព័ន្ធ
នាយករដ្ឋមន្ត្រី និងក្រសួងសាធារណការ និងក្រសួងសាធារណរដ្ឋបាល និងក្រសួងសាធារណរដ្ឋបាល

ତଥ୍ୟବାକୀତାମନ୍ଦରାଜୀବିନାରାମକୁମାରଙ୍ଗଜୀବି ସ୍ନେହ ପ୍ରତ୍ୟେଷଜିଲାପନ୍ତ୍ୟହାରାହାତୁପ୍ରତ୍ୟେଷଜାୟକାର୍ଯ୍ୟଶିଳାରାମପ୍ରତ୍ୟେଷି

Phase 2 Project's Implementation on the PRTR System

រៀបចំដោយ: ការិយាល័យគម្រោង PRTR នៃនាយកដ្ឋានគ្រប់គ្រងសាធារណក្រោះថ្មីក



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မန္တရာ

១. ប្រព័ន្ធសិលការអនុវត្តន៍តម្លៃរៀល

ప్ర. సత్కించుట

၆. ဖောက်တွင် အမြန် ပြန်လည် ပေါ်လိုက် မရှိနေ မရှိနေ မရှိနေ မရှိနေ



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១. ប្រព័ន្ធសិលវត្ថមនុវត្ថនត្រលេខាង

១.១ ការអនុវត្តគម្រោងដំណាក់កាលទី១ លើប្រព័ន្ធជិននៃយ៍ PRTR

- ប្រធែសកម្មជាប្រព័ន្ធដែលបានប្រើប្រាស់រឿងបច្ចុប្បន្នអនុវត្តគម្រោង PRTR ដំណាក់កាលទី១ នៅថ្ងៃ២០០៩ ដែលមានរយៈពេល ២ ឆ្នាំ និងមានប្រធែសច្ចុប្បន្នចំនួន ៣២
- គោលបំណង គឺជាយុទ្ធផលកម្មជាប្រព័ន្ធជិននៃយ៍ PRTR ដាក់ សំដើរដល់ ការលើកកម្ពស់ការគ្រប់គ្រងបរិស្ថាន និងការការពារសុខភាពមនុស្សពីគ្រោះហានិភ័យដែលបង្កើរដោយសារធាតុគិម្ធិ និងសំណាល់គ្រោះថ្នាក់។
- ជូយកាត់បន្ទូយភាពបង្កើរគ្រោះថ្នាក់ទៅលើមនុស្ស និងបរិស្ថាន ដែលបណ្តាលមកពីការសាយកាយ និងការបំលាស់ទីសារធាតុបំពុល តាមរយៈ ការប្រើប្រាស់ទិន្នន័យពីប្រកត និងបរិមាណសារធាតុបំពុលដែលសាយកាយ និងបំលាស់ទីសម្រាប់ធ្វើការកំណត់ និងវាយតម្លៃភាពបង្កើរគ្រោះថ្នាក់



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១. ប្រព័ន្ធសិលវត្ថមនុវត្ថនត្រលេខាង(ត)

១.២ លទ្ធផលសម្របបាន

- លទ្ធផលសម្របបានពីការអនុវត្តគម្រោងដំណាក់កាលទី១ រួមមាន៖
- បានកំណត់នៅក្នុងកម្មវិធី និងវិសាលភាពនៃប្រព័ន្ធជិននៃយ៍ PRTR
 - បានប្រើប្រាស់រឿងបច្ចុប្បន្នជាតិប្រព័ន្ធជិននៃយ៍ PRTR
 - បានប្រើប្រាស់រឿងបច្ចុប្បន្នជាតិប្រព័ន្ធជិននៃយ៍ PRTR (Key feature design)
 - បានអនុវត្តសាកលវិទ្យាបែងកសារឡាយគោលសម្រាប់ប្រព័ន្ធភិននៃយ៍ PRTR (Pilot trial)
 - បានប្រើប្រាស់រឿងបច្ចុប្បន្នជាតិប្រព័ន្ធជិននៃយ៍ PRTR (national executive proposal)
 - ប្រព័ន្ធជិននៃយ៍ PRTR (national executive proposal)



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៤. សេចក្តីផលនៃវិទ្យាល័យបច្ចុប្បន្ន



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៤.១ សមិទ្ធភន

□ បានរៀបចំយន្តការអនុវត្តតម្រន្យ

- ✓ រៀបចំការិយាល័យសម្របសម្រលគម្រោង និងក្រុមការដារនឹង
- ✓ បានរៀបចំផែនការការដារ កំណត់ថវិកា និងពេលដែលអនុវត្តន៍
- ✓ បានរៀបចំធ្វើបច្ចុប្បន្នការក្រុមការដារអន្តរក្រសង សម្រាប់

- រៀបចំការិយាល័យសម្របសម្រលគម្រោង និងក្រុមការដារនឹង
- រៀបចំការការដារ កំណត់ថវិកា និងពេលដែលអនុវត្តន៍
- រៀបចំការក្រសង សម្រាប់

ច្បាស់ ៤ : សំណង់សំណង់រៀបចំការិយាល័យសម្របសម្រលគម្រោង និងក្រុមការដារនឹង

ច្បាស់ ៥ : សំណង់សំណង់រៀបចំការការដារ កំណត់ថវិកា និងពេលដែលអនុវត្តន៍

ច្បាស់ ៦ : សំណង់សំណង់រៀបចំការក្រសង សម្រាប់



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៤.១ សមិទ្ធភន (ត)



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៣. សេវាគម្រោគកំពុលអនុវត្តត្រ និងជីវិះអនុវត្តបន្ថែម



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៣.១ ការរាយកំពុលយោបច្ចេនអនុវត្ត

- កំណត់ពីតម្រូវការជាកិសម្រាប់ប្រព័ន្ធឌីឡូនីយ PRTR
 - ✓ កំពុងផ្សេងការលំអិតសម្រាប់អនុវត្តកម្រោង និងយន្តការសម្របសម្រល
 - ✓ កំពុងផ្សេងបំកសម្រលដកសារកម្មវិធីប្រតិបត្តិជាកិសម្រាប់អនុវត្តប្រព័ន្ធឌីឡូនីយ PRTR (Update National Executive Proposal for PRTR implementing)



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៣.១ ផែនការអនុវត្តបញ្ជាផ្ទៃ

កំណត់ពីតម្រូវការដាក់សម្រាប់ប្រព័ន្ធចិន្នន័យ PRTR

- ✓ នឹងរៀបចំសាស្ត្រធម្មោយព័ត៌មានប្រព័ន្ធចិន្នន័យសារធាតុបំពុលដែលសាយកាយ និង
បំលាស់ទី (មេសា ២០១៧)
- ✓ នឹងរៀបចំប្រកាសដើម្បីដំឡើងលំការអនុវត្តគម្រោង ស្តីពី ការគ្រឿតពិនិត្យ ការធ្វើរាយ
ការណ៍ និងចែកចាយព័ត៌មានធាតុ POPs ដោយប្រើប្រាស់ប្រព័ន្ធចិន្នន័យ PRTR (មេសា
២០១៧)



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៣.២ ផែនការអនុវត្តបញ្ជាផ្ទៃ (ន)

ការកសាងសមត្ថភាព និងបណ្តុះបណ្តាលសម្រាប់ការអនុវត្ត PRTR

- ✓ រៀបចំ Online Module និងវគ្គបណ្តុះបណ្តាល TOT រួមមាន៖ ផ្តើកដោកកិច្ចាល
(Estimation techniques communication and planning) និងផ្តើកឯកជន
(រាជចក្រ-ខស្សាបកប្រឈម Estimation techniques and the reporting) ផ្តើកសង្គម
ស្ថិស៊ិល (NGO) និងផ្តើកព័ត៌មាន (responsible use of data, participation)
- ✓ រៀបចំគោលការណែនាំដាក់ ស្តីពីដើសសាស្ត្រគណនា ចំណេះដឹងបរិមាណសាយកាយ
សារធាតុបំពុលចូលទៅក្នុងបរិស្ថាន (national quidance on estimated teniques)
- ✓ ការអនុវត្តសាកល្បងដោយប្រើប្រាស់ដើសសាស្ត្រគណនាចំណេះដឹងសាយកាយទៅក្នុង
បរិស្ថានទៅតាមប្រកាសភាគាណុពលនានា



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၃.၃ ဖောက်များနှင့်အပွဲ့ (၁)

- ការកំណត់មាត្រាច្នាំនៃការប្រែបធៀប និងការវាយតម្លៃទិន្នន័យទទួលបានពីការអនុវត្តសាកល្បង និងការវាយតម្លៃគ្រោះ
 - ✓ រៀបចំនូវស្ថាដែងដើម្បីធ្វើការប្រែបធៀប និងការវាយតម្លៃទិន្នន័យទទួលបាន
 - ✓ ពិនិត្យ និងវាយតម្លៃពីការអនុវត្តគ្រោះ (ការកំណត់ និងពិនិត្យរួលិោនេះការពារគ្រោះ កំណត់នូវបច្ចាំ ការប្រឈមនានា និងកំណត់នូវទិន្នន័យ)

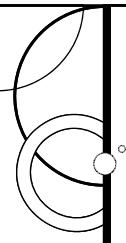


National Consulting Workshop/CKCC-RUPP- Phnom Penh **15 March 2017**

နှုတ်မန္တာရွှေခြံ



National Consulting Workshop/CKCC-RUPP- Phnom Penh **15 March 2017**

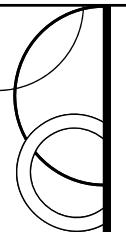


Annex 5: Mr. Roath Sith's Presentation

UPDATED CAMBODIA NATIONAL
EXECUTIVE PROPOSAL on
POLLUTANT RELEASE AND
TRANSFER REGISTER (PRTR)
DRAFT 2.0

PRTR Training Session and National Workshop on Drafting National Executive Proposal and Practical uses and dissemination strategy of PRTR Data, CKCC/RUP, Phnom Penh: 15 March 2017

1



Contents

- I. Introduction
- II. Objectives of the National PRTR System
- III. Legal Implementation of the National PRTR System
- IV. Reporting requirements and procedure for point source emission
- V. Treatment of non-point and non-reporting point sources of emission
- VI. PRTR data management system
- VII. Administration of the national PRTR system
- VIII. Appendices

2



INTRODUCTION

- Cambodia Rational on Pollutant Release and Transfer Register
 - Draft ENR Code, which is comprised of 4 main chapters and 9 articles under Book 6 (Waste and Pollution Management), Title 10 (National Pollutant Release and Transfer Register).
 - International agreements and conventions:
 - The Stockholm Convention on Persistent Organic Pollutants (POPs) and Strategic Approach to International Chemicals Strategic Approach to International Chemicals Management (SAICM)
 - The United Nations Framework Convention on Climate Change (UNFCCC)
 - The Stockholm , Basel, and Rotterdam Conventions,
 - Minamata Convention on Mercury

3



INTRODUCTION (cont.)

- PRTR's role in the unified Environmental Database (ED) and Public Participation
 - Provide public access to environmental information (data, geographical and documentary) validated, standardized, integrated, timely, consistent, reliable, all of society through the internet.
 - Standardize and automate the production environment data for decision-making through further development of indicators that are based on principles of availability, reliability and integrity.
 - Similarly, the PRTR support the automation of processes in the monitoring and evaluation (M&E) and integration with the geographical and the automation of corporate documentary memory. In particular will:
 - Provide clear, complete and comprehensiveness information/data for users, companies and individuals, and
 - Issue permits, authorizations, licenses and certifications.

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OBJECTIVES OF THE NATIONAL PRTR SYSTEM

- Overall Goals of PRTR
 - the National PRTR is “a publicly available, interactive database to inform the government, the private sector, any legal entity or natural person and the public about releases of environmental pollutants to the environment; to assist government entities, researchers, and other legal entities or natural persons in the conduct of research and data gathering; to support the development of appropriate regulations, guidelines, and standards; and for other similar purposes”.

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OBJECTIVES OF THE NATIONAL PRTR SYSTEM (Cont.)

- Overall Objectives of PRTR
 - Increase the capacity of the Ministry to fulfill its obligations relating to reports, the exchange of information and public awareness through the implementation of a PRTR,
 - To formalize the design process PRTR in Cambodia with the participation of the government sectors involved, as well as interested and affected parties,
 - Provide information and technical expertise relevant to make informed decisions about the PRTR that take into account National needs and circumstances, and
 - To strengthen civil society capacity to participate substantially in the design process PRTR and improve the availability of environmental information provided by the government to the public.

6



LEGAL IMPLEMENTATION OF THE NATIONAL PRTR SYSTEM

- New or existing regulations and legislation under which the PRTR system will operate
 - the World Submit on Sustainable Development (WSSD), Vision 2020 stated that “chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment”.
 - “National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants” (NIP), adopted in June 2006;
 - *The purpose of this Title is to establish a National Pollutant Release and Transfer Register for the Kingdom of Cambodia. A National Pollutant Release and Transfer Register is a publicly accessible database or inventory of chemicals or pollutants released to air, water and soil and transferred off-site for treatment.* (Chapter 1, Article 1, Title 10 (National Pollutant Release and Transfer Register), Book 6 (Waste and Pollution Management), of the ENR Code).

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LEGAL IMPLEMENTATION OF THE NATIONAL PRTR SYSTEM (cont.)

- Schedule for development of the requisite legislation
 - It is hard to set timeline for mandating PRTR to be national wide implementation because of limitation of legislation, resources, guideline and capacity. Nevertheless, for the interim period the Ministry of Environment will issue ministerial ordinance to encourage facilities to implement PRTR as a pilot stage and full PRTR implementation will be conducted later soon after the ENR code adapted by legislative body.
- Current environmental data reporting requirements to be replaced, modified, or integrated with the PRTR reporting scheme
 - To date, there is no environmental data reporting requirement is in place; however, such requirement will be carried out after the new Cambodia ENR Code adopted.

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REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS	
<ul style="list-style-type: none"> • Definition of technical terms <ul style="list-style-type: none"> ◦ Selection protocol substances 	
Parameters regulated in Cambodia	International Agreements
<ul style="list-style-type: none"> • Emission to air • Wastewater discharges • Generation and management of hazardous wastes 	<ul style="list-style-type: none"> • Stockholm Convention • Climate Change Convention and Kyoto Protocol • Strategic Approach to International Chemicals Management (SAICM) • Stockholm, Basel, and Rotterdam Conventions • Minamata Convention

REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)	
<ul style="list-style-type: none"> • List of substances subject to PRTR reporting: <ul style="list-style-type: none"> ◦ Persistent organic pollutants (i.e. 12 existing POPs and 09 new POPs), cover only PCBs, Dioxin and Furans (during the initial stage); ◦ Ozone layer depleting substances (i.e. Methyl bromide, CFCs, HCFC); ◦ The greenhouse gases (i.e. carbon dioxide, methane); ◦ Hazardous chemicals that are contained in wastes as specified under the Basel Convention, i.e. cadmium, mercury, chromium, lead, etc. (regardless employees numbers) ◦ Parameters: BOD, COD, Particular matters, 	

REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Procedures for reviewing, adding, or deleting substances from the PRTR list

Nº	Responsible Agent	Activity
1	Industrial facilities or service providers	The head of the industrial facility or service provider is presented to the competent authority to request information and PRTR format
2	Receipt by the National Environmental Authority	Delivery charge PRTR Format and instructions for filling in paper and electronic forms as well as help guide for filling.
3	Industrial facilities or service providers	Complete the form electronically and return it to the reception at the offices of the Environmental Authority.
4	Receipt by the National Environmental Authority	Check that all fields are properly filled. If filling is correct, seal and signature of receipt PRTR format. If you find any incorrectly filled fields, the format returns to the company in writing indicating irregularities. If this occurs within the time limit for receipt, indicate in writing the reasons for return, giving a deadline for the company to submit the corrected format.
5	Industrial facilities or service providers	When returning the form, the company revises and corrects the filling of it. Delivery format corrected, upon receipt of the environmental authority, following the same steps above.
6	National Environmental Authority	Processes paperwork received PRTR electronic format and integrates the information into a database PRTR. PRTR integrates and publishes the annual releases and transfers of pollutants reported.

REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Criteria and thresholds that trigger PRTR reporting by facilities/ emissions sources

No.	Activity	Capacity threshold (column 1)
1.	Energy sector	
(c)	Thermal power stations and other combustion installations	With a heat input of 50 megawatts (MW)
3.	Mineral industry	
(c)	Installations for the production of: <ul style="list-style-type: none"> (i) Cement clinker in rotary kilns (i) Lime in rotary kilns (i) Cement clinker or lime in other furnaces 	With a production capacity of 500 tons per day With a production capacity exceeding 50 tons per day With a production capacity of 50 tons per day
5.	Waste and waste-water management	
(a)	Installations for the incineration, pyrolysis, recovery, chemical treatment or landfilling of hazardous waste	Receiving 10 tons per day
(d)	Landfills (excluding landfills of inert waste)	Receiving 10 tons per day or with a total capacity of 25,000 tons
6.	Paper and wood production and processing	
(b)	Industrial plants for the production of paper and board and other primary wood products (such as chipboard, fibreboard and plywood)	With a production capacity of 20 tons per day



REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Facilities or sources exempted from PRTR reporting
 - Therefore, nonpoint source and other facilities beside SME shall be subjected to exempt from PRTR reporting
- Management of confidentiality claims
 - Procedures for filing, reviewing and granting/denying confidentiality claims
 - Procedures for entry of generic data into the PRTR database in place of data claimed as confidential

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REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Data elements to be included in the reporting format
 - Facility specific data elements:
 - Company name;
 - Location, latitude and longitude of the plant site;
 - Standard Industrial Classification (SIC) or other industrial sector classification;
 - Number of employees;
 - Environmental operating permits and licenses;
 - Name and telephone number/address of facility contact person;
 - Signature of a plant executive or other high level company official.

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REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Data elements to be included in the reporting format
 - Chemical specific data elements
 - Identification of the substance (Chemical Abstract Service (CAS) number or other standard chemical classification);
 - On-site emissions/discharges to air, water, land (specify units of measurement);
 - Off-site transfers (specify units of measurement and quantities recycled, recovered, treated, and/or finally disposed including identification of the receiving locations);
 - Accidental releases to air, water, land;
 - Explanations of changes in quantities emitted/released or transferred since the previous report; and
 - Anticipated or planned reductions in quantities emitted or transferred.
 - Other optional data elements
 - Such as energy and water use, emissions reduction measures, recycling methods, pollution prevention activities, chemical use information, etc.

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REPORTING REQUIREMENTS AND PROCEDURES FOR POINT SOURCES OF EMISSIONS (Cont.)

- Emissions Estimation Methods
 - Acceptable procedures for estimating emissions
 - Assistance or support provided to reporting facilities
 - Information, instructions, and training activities for reporting industries
 - Assistance and services to be provided during the first reporting cycle

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TREATMENT OF NON-POINT AND NON-REPORTING POINT SOURCES OF EMISSIONS

- Definitions of non-point, diffuse, and non-reporting sources
- Procedures for estimating emissions/releases from non-point, diffuse, or nonreporting point sources
- Procedures and format for including these emissions estimates in the general PRTR database

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PRTR DATA MANAGEMENT SYSTEM

- Software requirements and specifications for the PRTR system
- Hardware requirements and configuration for the PRTR system
- Reporting format

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ADMINISTRATION OF THE NATIONAL PRTR SYSTEM

- Institutional responsibilities for data collection and management
 - Specification of procedures and agencies responsible for
 - Infrastructure and budget requirements for the operation of data collection and management procedures
- Institutional responsibilities for data analysis and dissemination
 - Specification of procedures and agencies responsible for
 - Data access and dissemination mechanisms

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APPENDICES

- Appendix 1: List of substances and parameters for PRTR (Proposal for Long-term Run)
- Appendix 2: List of substances and parameters for PRTR (Proposal for further Demonstration Activities)
- Appendix 3: Template for PRTR Reporting
- Appendix 4: Glossary

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APPENDICES (Cont.)

- Annex 1: List of substances and parameters for PRTR

CATEGORY	SUBSTANCE / PARAMETER
Substances	Methane
	Nitrous oxide
	Hydrofluorocarbon (HFC)
	Perfluorocarbons (PFC)
	Carbon Dioxide
	Sulfur hexafluoride
	Sulfur dioxide
	Nitrogen dioxide
	Carbon monoxide
	Total Particles
Atmospheric pollutant criteria	PM ₁₀
	PM _{2.5}
	Plumb
	Ozone
	Methane
Greenhouse Gases (Climate Change Convention and Kyoto Protocol)	Nitrous oxide

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APPENDICES (Cont.)

- Annex 1: List of substances and parameters for PRTR

CATEGORY	SUBSTANCE / PARAMETER
Substances	Perfluoroctane sulfonic acid, their salts and perfluoroctane sulfonyl fluoride
	Perfluoroctane sulfonic acid, their salts and sulfonyl fluoride perfluorooctano
	Aldrin
	Alpha hexachlorocyclohexane
	Beta hexachlorocyclohexane
	Beta-Chlordane
	Polychlorinated biphenyls (PCBs)
	Chlordecone
	DDT
	Dibenzoparadioxins polychlorinated and dibenzofurans (PCDD / PCDF)
	Dieldrin
	Endrina
	Hexabromodiphenyl ether and ether heptabromodiphenyl
	Hexabromodiphenyl ether, heptabromodiphenyl, octabromodiphenyl ether
	Tetrabromodifenil ether and pentabromodiphenyl ether
	Tetrabromodiphenyl ether and pentabromodiphenyl ether
	Heptachlor
	Hexabromobiphenyl
	Hexachlorobenzene
	Lindane
	Mirex
	Pentachlorobenzene
	Toxaphene

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APPENDICES (Cont.)

- Annex 1: List of substances and parameters for PRTR

CATEGORY	SUBSTANCE / PARAMETER
Substances	Aluminum
	barium
	Cadmium
	Total cyanide
	Chromium
	Antimony
	Arsenic
	Cobalt
	Copper
	Tin
	Methyl mercury
	Mercury, including mercury compounds, alkyl mercury compounds alkoxy alkyl and aryl mercury
	Nickel
	Palladium
	Plomo II
	Silver
	Platinum
	Selenium
	Thallium
	Tellurium
	Vanadium
	Zinc

APPENDICES (Cont.)

- Annex 1: List of substances and parameters for PRTR

CATEGORY	SUBSTANCE / PARAMETER
Substances	Acids or bases that can cause pollution, explosives or flammable
	Chloroform
	Compounds phenolics
	Volatile organic compounds (VOCs)
	Polycyclic aromatic hydrocarbons, PAHs
	Total petroleum hydrocarbons (TPH)
	Sulfates
	Sulfides
	Sulfides carbon
	Oils and fats
Parameters	Carbonates
	Active chlorine
	DBOS/BOD5
	DQO/COD
	Total phosphorus
	Total Kjeldahl Nitrogen
	Total manganese
	Floating matter
	Mercury (total)
	Settleable solids
	Total Suspended Solids
	Total Solids
	Surfactants



Annex 5: Mr. Andrea CARARO's Presentation



Strategies for data dissemination and public access to PRTR information



14-15th March 2017

Presentation of PRTR Data

***“Dissemination and presentation of data
are an integral part of the PRTR process”***



Slide 1

AC1 change picture!

Andrea CARARO, 2017-03-08

Presentation of PRTR Data

The dissemination of PRTRs data is a powerful tool for communicating information about the environment:

- Government, industry, and the public all benefit from the PRTR data
- The value of PRTR data can be enhanced by the techniques used to present the data → Providing a range of tools to communicate PRTR data will help a wide variety of audiences to better comprehend what the data mean
- Information sharing through internet and the increasing use of information as an environmental policy tool offer significant opportunities for disseminating and presenting PRTR data



Who presents and disseminates the data?

Key actors in PRTR awareness raising

National Governments

Non-Governmental
Organizations (NGOs)

Industries

Local Communities

Academia

Regional inter-governmental Bodies

State/Provinces



Public access to PRTR data

The first questions that need to be asked in developing a dissemination and presentation strategy are:

- i. What are the PRTR's goals?
- ii. Who are the audiences?
- iii. What do the audiences need?
- iv. What data are to be disseminated, e.g. full sets of reported data, aggregated data, data sorted by different themes or topics?
- v. How are data to be disseminated? Which media will be used, e.g. paper (summary reports, factsheets, special reports), or electronic (Internet, CD-ROM)?
- vi. How data can be presented so that all levels of affected and interested parties can easily understand them?
- vii. What context data are needed (geography, economic, production volume, etc.)?



Dissemination and Presentation strategies

i. What are the PRTR's goals?

- Fulfilling the public's right-to-know;
- Identifying opportunities and encouraging pollution prevention;
- Encouraging cleaner production;
- Improving public participation in environmental policy decision-making;
- Identifying areas for action (e.g. hot spots of pollution or of a "specific" chemical) and setting priorities;
- Measuring progress toward environment goals and policy objectives;
- Monitoring policy performance; and
- Improving the public's understanding of environmental issues.



Dissemination and Presentation strategies

ii. Who are the PRTR's audiences?

There is a great variety of users of PRTR data, ranging from all levels of government to the general public:

- Policy-makers (i.e. Governments)
- Individual facilities, industry groups, firms
- Professional and industries associations
- Investors, suppliers and consumers
- Local communities
- Educational institutions
- Civil Society (e.g. NGOs, Environmental citizens' organizations)



Dissemination and Presentation strategies

iii. What do PRTR audiences need?

- Identify information needs in consultation with potential audiences or users
- Summary data and presentations that emphasize overall trends and progresses made → Broader audiences
- Detailed subsets of the data or complete raw data → Industries
- Analysis of aggregate PRTR data (specific substances and group of substances, performance of particular environmental policies, performance by industrial sectors or geographical distribution) → Policy-makers
- Focus on potential risk for health problems, particular industries or locality → NGOs, Public
- Academia and research organizations working on risk screening use PRTR data for a range of activities, including as an input into different models



Dissemination and Presentation strategies

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Dissemination and Presentation strategies

v. How are data to be disseminated?

- Print publications, Internet web sites, electronic media (USB sticks, CD-ROMs), and direct on-line data access.
- More companies are placing their PRTR data on company web sites, e.g. the Canadian Chemical Producers Association's (CCPA) annual report
- In the US, public interest groups work together with local communities to create geographic databases, publish newsletters explaining local environmental conditions, and publish PRTR data in local newspapers
- A government may choose to make its complete PRTR database accessible via internet to give the public access to its complete database
- Annual printed reports that summarize PRTR data will often be made available on the Internet as well—PDF files allow such print-based documents to be downloaded from web sites and read on-screen or printed locally by any interested web visitor
- Costs will affect the choice of dissemination options



Dissemination and Presentation strategies

vi. How are data to be presented?

- Data presentations should reflect the disseminators' priorities;
- PRTR data can be analyzed by many factors, for example by chemical group, geographic region, industrial sector or activity, type of release or transfer, type of media, and other parameters;
- Presenting the results of these analyses focuses attention on particular problems and opportunities, whether at national, state/provincial, or local levels;
- Incorporating available facility-specific data serves community needs and can aid both local governments and citizens' groups with their analyses;
- Visual tools serve particular purposes in presenting the findings of PRTR data analysis: charts help to clarify the distribution and trends;
- Maps and the geographic presentation of pollutant concentrations provide users with a simple and understandable presentation of conditions in a community, ecosystem or province.



Dissemination and Presentation strategies

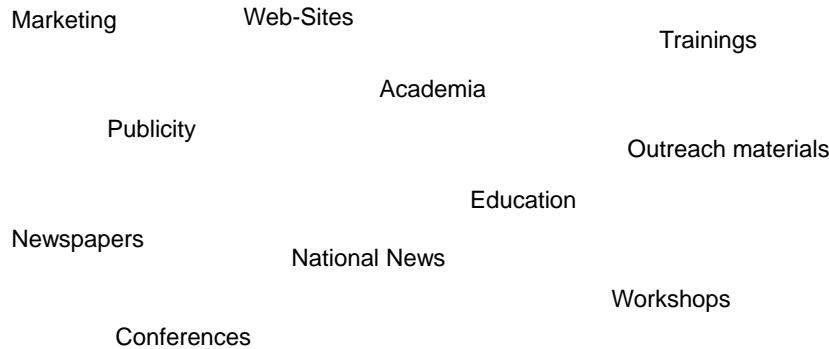
vii. What context data or information are needed?

- External information include: geography, ecology, toxicity and hazard of listed chemicals, demographics, economics, and other types of information;
- Economic data enhance PRTR analyses by business sector;
- Demographic data assist in priority-setting and decision-making processes;
- Local community contexts, e.g. school locations, information on sewage and water treatment capabilities, etc.;
- Chemical/physical properties, health and environmental effects, and information on the fate and transport of a substance in the environment;
- Information on common uses of reportable substances, their role in industrial processes, and their likely presence in products



Promote PRTR Awareness

Tools to enhance presentations and dissemination:



Conclusions

- inform the public that the PRTR data exist
- ensure easy public access,
- provide information, education and training concerning the meaning and use of the data
- Challenges → accuracy and timeliness, providing context and training, building links with related data



OECD Guidelines
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