

Session 2 Report “OPTIMIZING SANITATION TECHNOLOGY – WAY TO SELECT THE MOST SUITABLE SANITATION TECHNOLOGY TAILORED TO LOCAL CONDITIONS”

1. The session 2 was co-chaired by Ms. Amy S. P. Leung (Asian Development Bank) and Mr. Takehiko Kawai (Japan Sanitation Consortium).
2. Dr. Bindeshwar Pathak described the Sulabh Pour-flush Toilets with Twin Pits as a good sanitary option and cheap technology. He emphasized that low maintenance is needed and this system works either with cold and hot temperatures.
3. Dr. Chizuru Aoki made a presentation on the Selection of Environmentally Sound Technologies for Wastewater Management, drawing the attention to the importance of a preliminary assessment for the selection of suitable technologies.
4. Dr. Hui Zhao presented centralized approaches regarding rural wastewater treatment in China. He showed several case studies with different decentralized treatment processes.
5. Ms. Yuyun Ismawati introduced the SANIMAS system in Indonesia. SANIMAS plays an important role to improve urban sanitation in Indonesia.
6. Mr. Antonio Cesar da Costa e Silva described how wastewater treatment technology is selected, depending on local conditions such as population, the amount of wastewater load and its concentration.
7. Dr. Satoshi Takizawa detailed the history of wastewater management in Japan and the different systems used for wastewater treatment and pollution reduction. He also highlighted the effective current combination of on-site (Johkasou) and off-site technologies, depending on population density.
8. After the six presentations, the speakers and audience discussed the key points to consider locally, and according to conditions, the treatment process to choose for sanitation improvement.
9. Sanitation technology is essential as it connects the wastewater generated by human activity, to rivers, i.e. water resources. The following conditions were selected as the most important items to consider locally for the choice of suitable sanitation technologies:
 - 1) natural characteristics
 - 2) population density
 - 3) financing situation
 - 4) management capacities
 - 5) people knowledge and understanding on sanitation
10. General consent was achieved about the formulation of a suitable matrix for technology selection that would consider local conditions and several evaluation criteria to determinate the most suitable sanitation technology according to areas. Sanitation technologies involve night soil/sludge and wastewater/stormwater collection, treatment and reuse systems.
11. The clearinghouse network of sanitation technologies should be developed among expert organizations such as JSC and UNEP. To disseminate and make those technologies happen, the promotion of a suitable matrix for technology selection should be emphasized as an effective tool, where capacity buildings and feasibility studies are developed.