

Problems of landfill in developing countries (LDCs)

Under the anaerobic landfill type

- Fire risk by methane gas generation
- Worsening of the living condition by the leachate and odor.
- Collapsed Landfill from inappropriate management
- Lack of Money and Technology



➤ **Required the application of sustainable management technology for wastes landfill**



Status of supporting technology to LDCs

【At present: the technology in developed countries】
⇒ Difficult to maintain the landfill operation because of lacking the money and technology

【In future: Fukuoka method】
⇒ Improving sustainability through construction by using simple technology, local materials and management by local staff



Objective of Research

- ★ Promotion of JCM projects with the realization of methane gas reduction by region.
- *International contribution with landfill technology (CDM technology : AC0093) developed in Fukuoka University*
- Verification of the reduction effect by the modeled landfill with Fukuoka method.
- Updating the default value of MCF (Methane Correction Factor) in IPCC guideline,



Example of reduction effect of GHGs emission by Fukuoka method in Asian region

★ *The MCF(0.5) of semi-aerobic landfill was determined based on the experimental data of Fukuoka University*

