



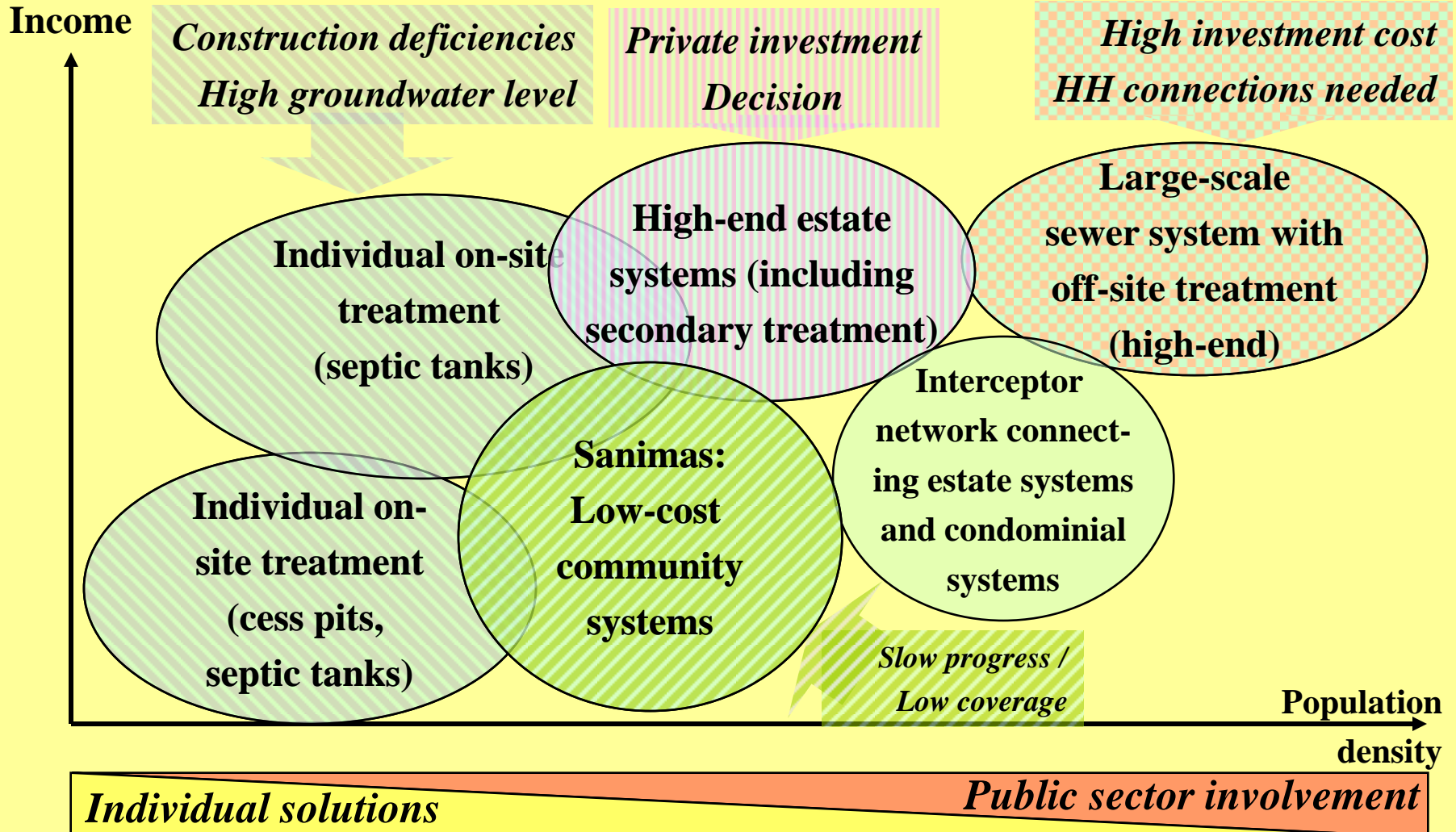
Agenda for Indonesia-Netherlands Cooperation

Urban Environmental Sanitation Technical Solutions and Financing

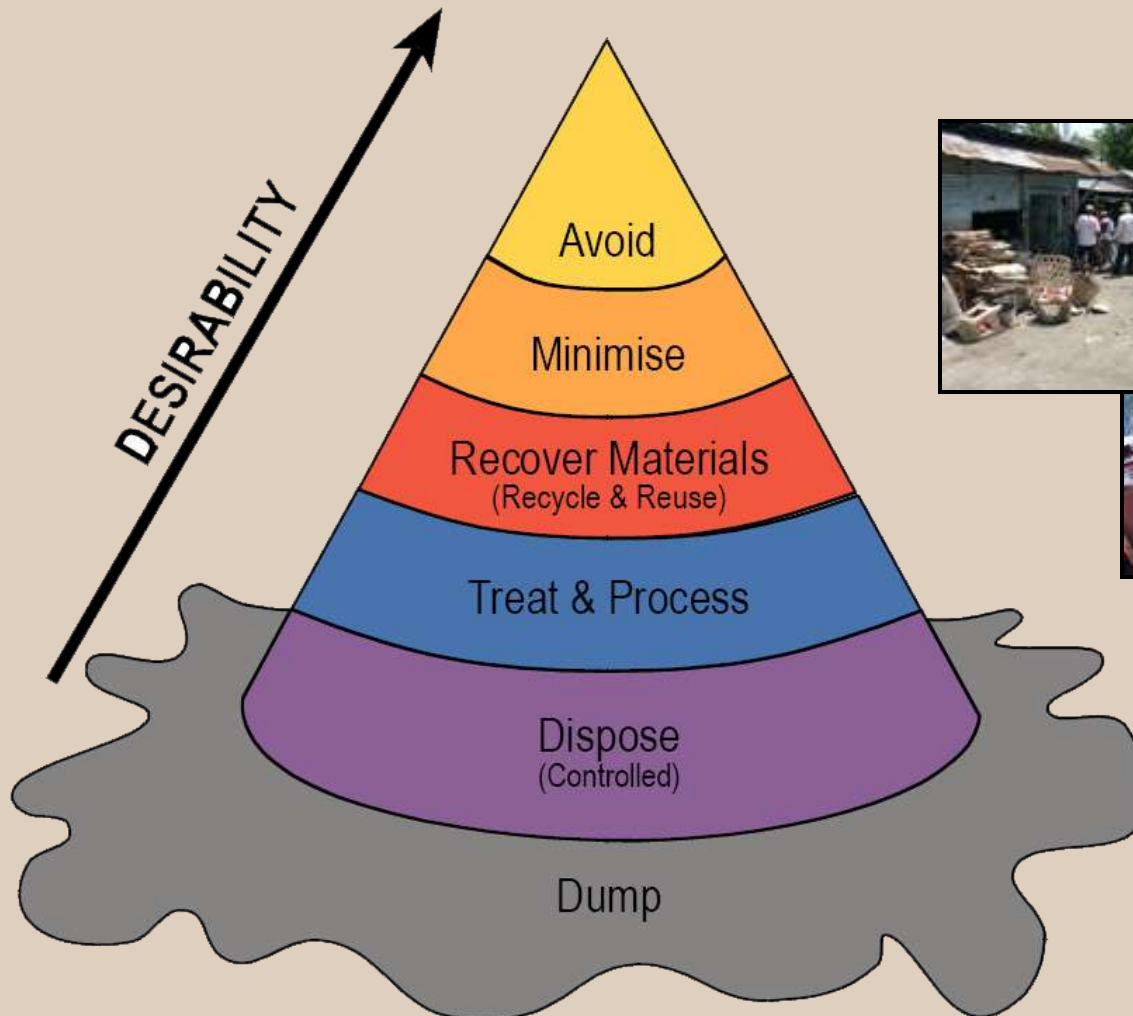


presented by: **Menno Oppermaann (DHV)**

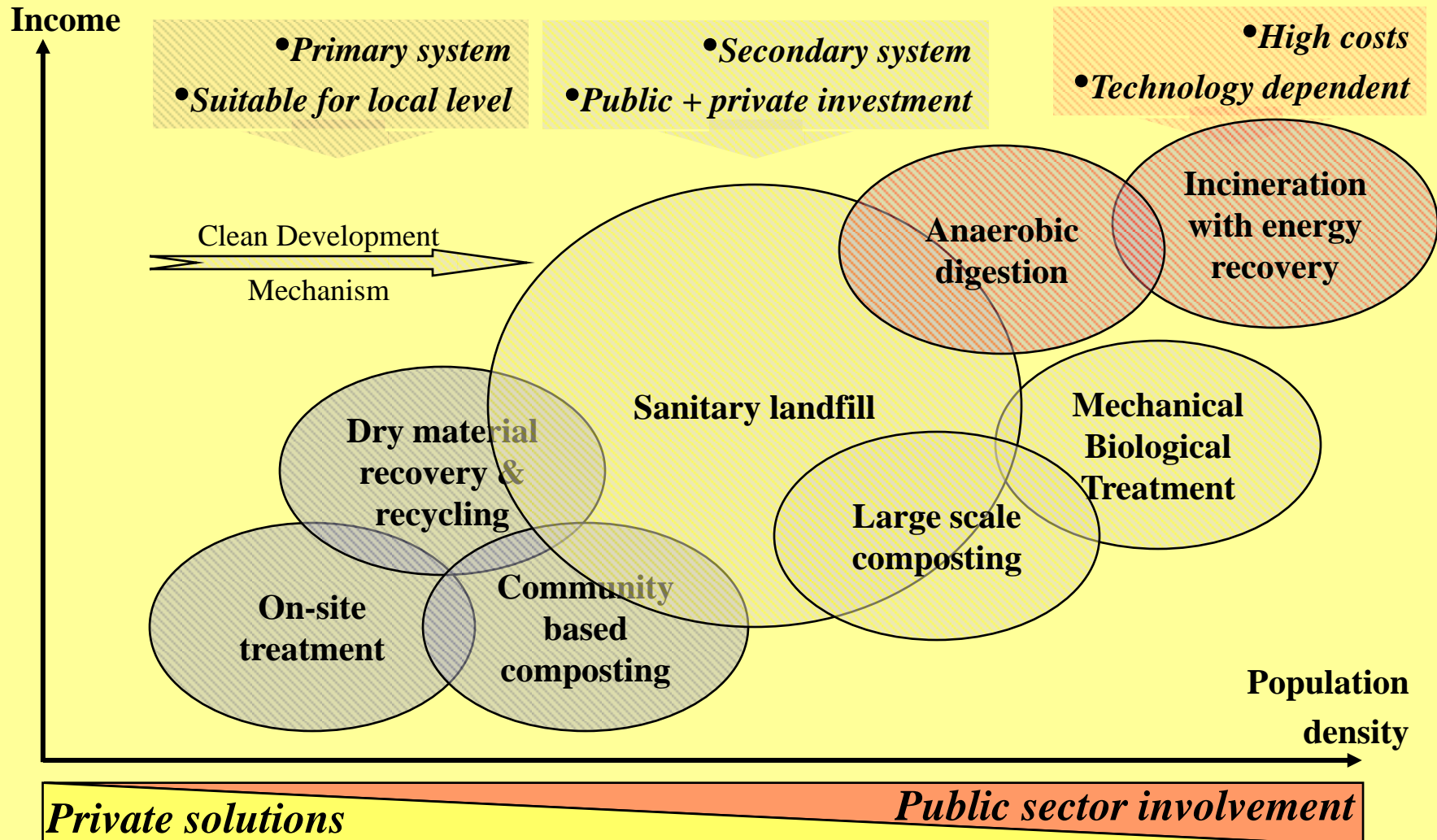
Selecting Wastewater Management Solutions



The Waste Management Hierarchy



Selecting Solid Waste Management Solutions



City Sanitation Strategy – The Features



- **Integrated** (politicians, administrators/POKJA, private sector and the community)
- **Comprehensive** (sewerage, solid waste and local drainage)
- **City wide** and incorporated in existing planning mechanisms
- **Bottom up** meets **Top Down**
- **Evidence based** (EHRA studies, other studies)
- **Long term vision** with short term **action plans**
- Simultaneous **awareness creation**



Sustainability



- **Demand based:** awareness and support by local politicians
- **Appropriate designs**
- **Full cost recovery** (city subsidies required)
- **Dedicated operators** (PD PAL, BLUD, etc.)
- High level of **customer service**
- Effective **community arrangements**



Financing



*Key question:
“How to get more funds for sanitation?”*

*Improve financial / plan
coordination with
Provincial and Central
Government*

*Mobilize local resources
by applying “Polluter pays”
principle*

*Establish sound basis
for implementation
at local level*

*Stimulate and regulate
private investment*

*Use appropriate
technical solutions
with community
participation*

Financing options



	OFF SITE		ON SITE	
	Investm ents	Reccurre nt costs	Investm ents	Reccurre nt costs
Local revenues	+/-	+	-	-
Tariffs	-	+	-	-
Community schemes	+/-	+	+/-	+
Private housing estates	+	+	+	+
Government support (national & provincial)	+	-	-	-
Donors	+	-	+/-	-
Corporate social responsibility	+	-	+/-	-
Individuals	-	-	+	+

Possible Netherlands Contributions



- Support for **capacity building** in fields of urban sanitation and institutional strengthening
- **TA grants**, piggy-backed to sanitation infrastructure loans from ADB, WB or EU
- **Twinning and cooperation agreements** between cities, water boards, universities and polytechnics
- **Scholarships** on sanitation
- **R&D support** for appropriate technologies for **Indonesian** sanitation problems



Terimakasih

Dank U wel

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