

CSIR into the future

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Towards improved waste management services by local government – A waste governance perspective by Dr Suzan Oelofse

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CSIR





Outline of Presentation

- Background
- Governance challenges
- Materials and methods
- Results
- Conclusions



News Reports: 2005-2008

SA'S RUBBISH CAPITAL

Big stink continues as piles of garbage dumped in streets hit crisis levels

City is drowning in waste

Toxic waste at municipal dump

WASTE COMPANIES DUMP DEATH ON OUR DOORSTEP

Waste management not just a question of garbage

Outrage at massive toxic waste dump

Human tissue, old bandages and used syringes pile up as waste disposal crisis spirals out of control



Medical waste in river: Tsolo warned

Half SA's waste sites are illegal - minister

Razardous Waste Site Raises Some Concern

City's filthy rivers of waste hard to swallow



'The industry is in crisis... It is cut-throat and something is very wrong. The stockpile is symptomatic of a bigger problem'

— JOANNE YAWITCH
Environmental Affairs
deputy director-general

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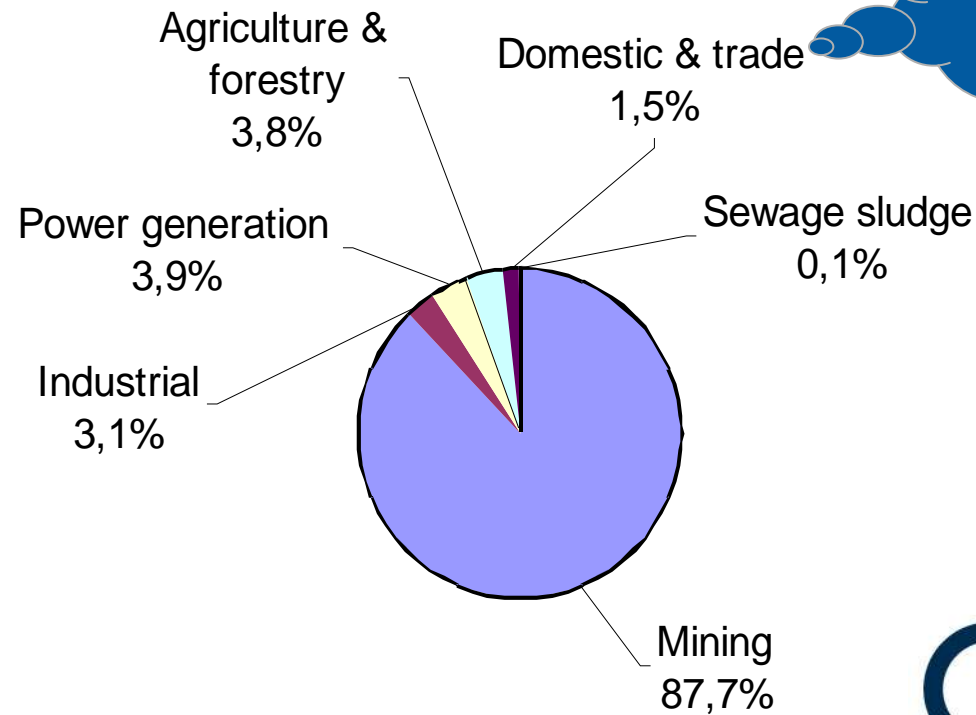
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Background

- Waste generation in RSA = 533 Million tons per annum

0.7
kg/person
/day

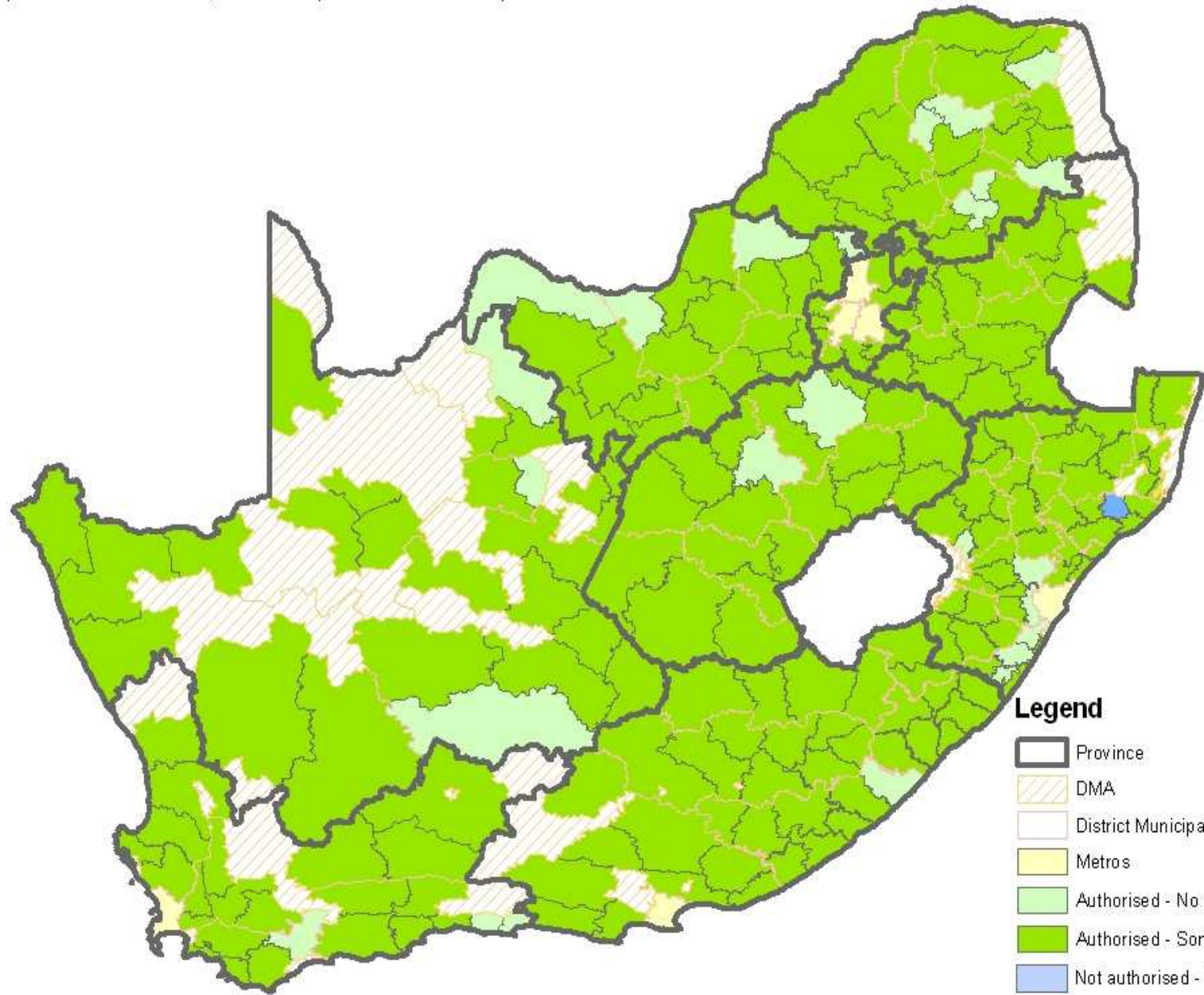




Shocking facts

- 39% of households no regular waste collection
- 8.3% of households use bucket sanitation system
- 66% of landfills operate without permits
- 90% of non-permitted is municipal landfills
- 96% of micro small and medium sewage plants not adequately operated and maintained
- 30 000 people, mostly children, die annually of diarrhoea or related diseases

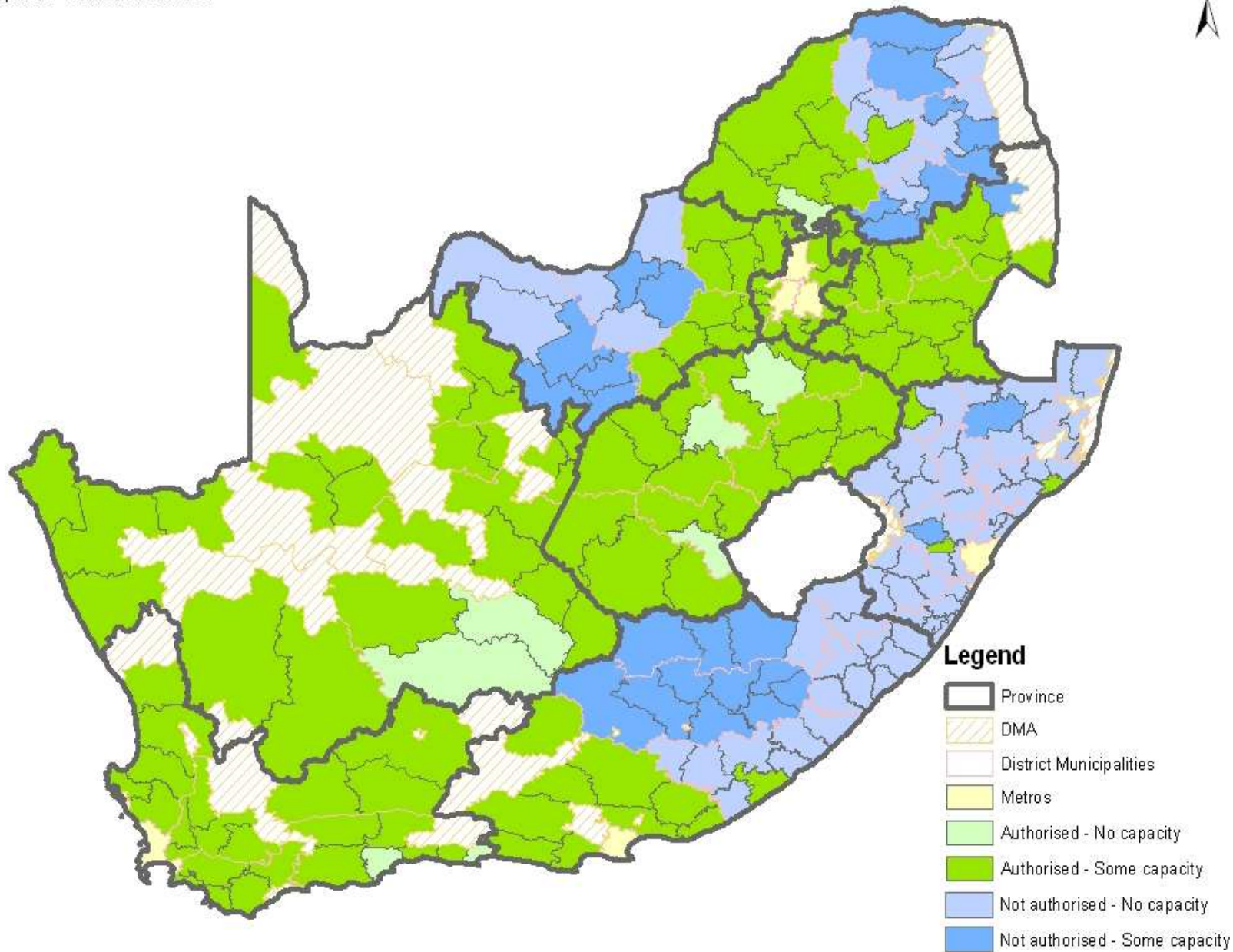




Legend

- Province
- DMA
- District Municipalities
- Metros
- Authorised - No capacity
- Authorised - Some capacity
- Not authorised - No capacity
- Not authorised - Some capacity

Local Municipalities - Sanitation Services





Governance challenges

- 2007/08 municipal capacity assessment of 231 local municipalities
 - 11% no capacity for waste management functions
 - 37% no capacity for sanitation functions
- Primary reasons
 - insufficient budget
 - too few staff
 - lack of appropriate equipment
 - poor access to service areas
- Secondary reasons
 - lack of reliable waste data
 - function allocations between departments



Materials and methods

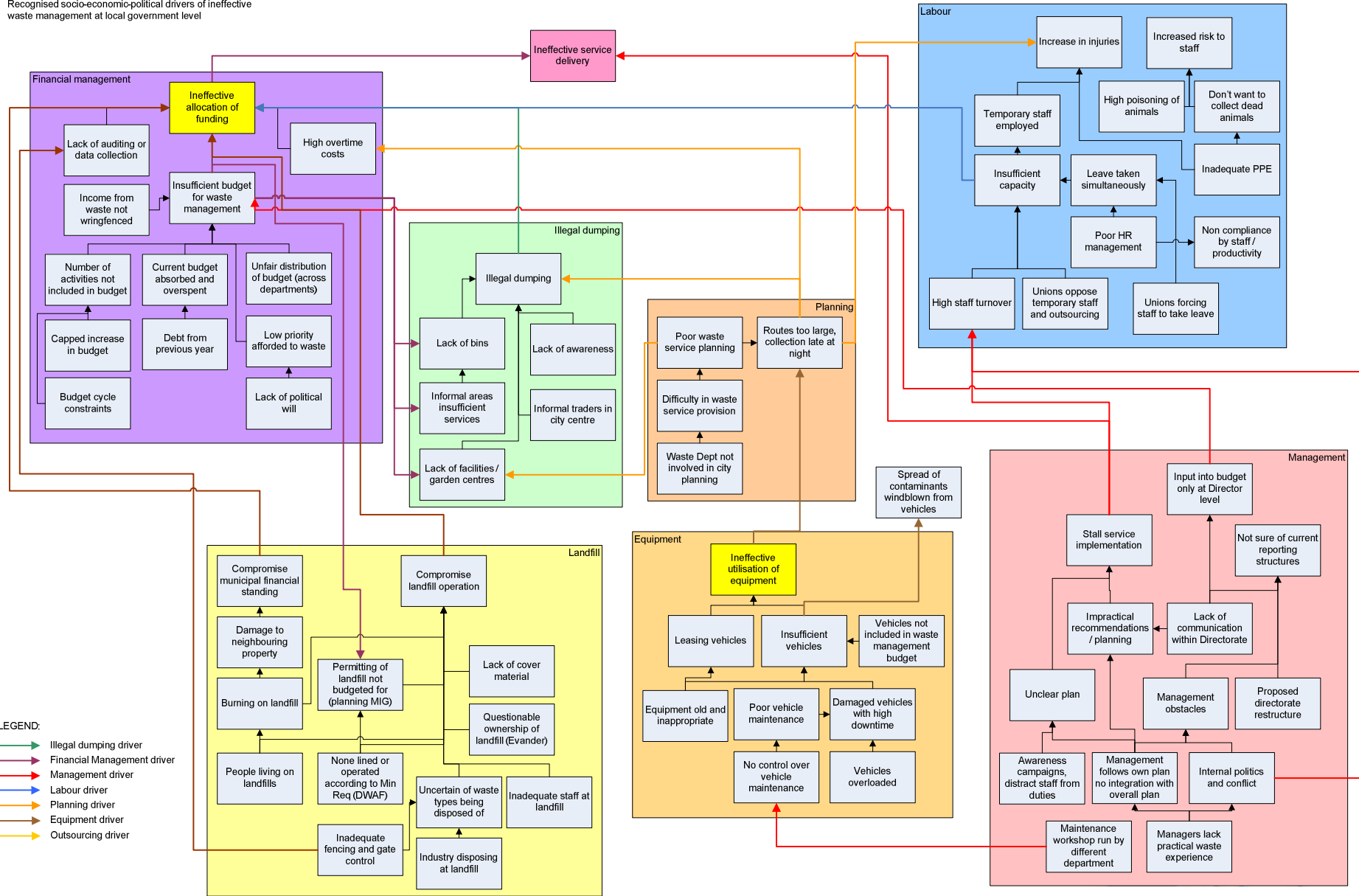
- Five urban local municipalities



Municipality	Population (2007) ⁽¹⁾	Households (2007) ⁽¹⁾	2006/07 Operational budget for refuse (R/annum) ⁽²⁾	Operational budget per household (R/annum) ⁽³⁾	% households with access to refuse collection (2007)	Operational budget per serviced household (R/annum) ⁽¹⁾
1	268 954	79 191	R30 238 000	R382	83.2%	R459
2	435 217	105 592	R29 735 495	R282	57.5%	R490
3	449 776	146 542	R27 887 535	R190	48.0%	R396
4	527 203	137 353	R30 294 830	R221	29.2%	R755
5	349 087	89 831	R12 151 263	R135	15.2%	R890



Systems Diagram: Govan Mbeki Local Municipality:
 Recognised socio-economic-political drivers of ineffective waste management at local government level





Results

- Four broad themes of challenges identified
 - Financial management
 - Equipment management
 - Labour (staff) management
 - Institutional behaviour
 - Management
 - Planning



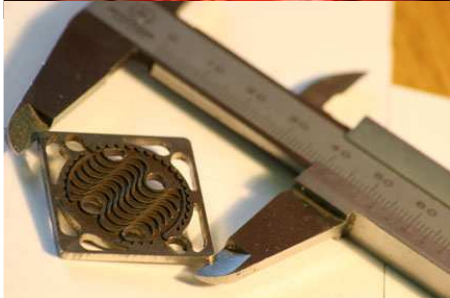
Results

- Underlying reasons
 - Capping of municipal budgets (year on year growth) by National Treasury
 - Ineffective cost recovery at disposal sites
 - Delays in finalising municipal budgets (up to 3 months)
 - Theft of infrastructure i.e. fencing, power cables
 - Reducing of operational budgets by senior managers



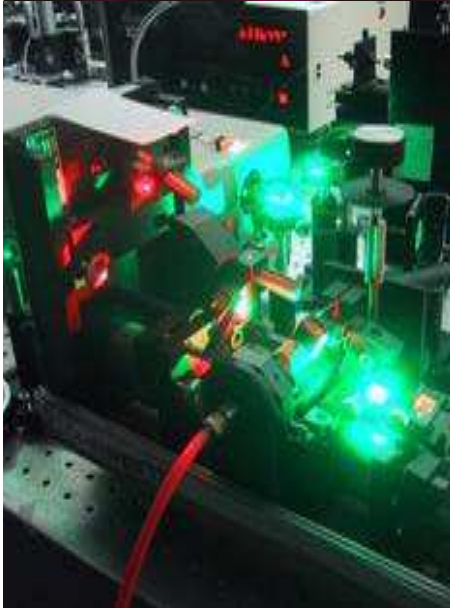
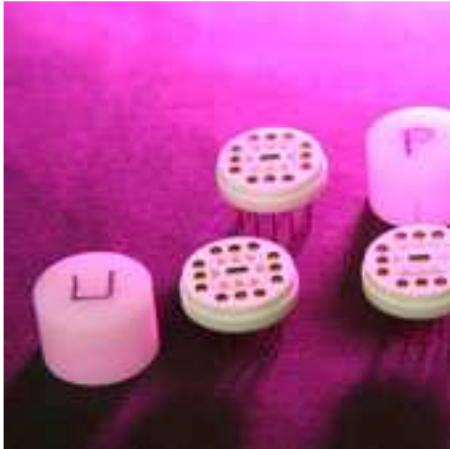
Local interventions

- Awareness creation
 - Public
 - Municipal planners
 - Politicians
- Capacity building
 - Training
 - Mentoring
 - Practical experience
- Maintenance
 - Routine maintenance
 - Repair



Local interventions

- Holistic planning
 - Integrated development plans
 - Integrated waste management plans
 - Water services development plans
- Enforcement
 - By-laws
 - Illegal dumping
 - Littering
 - compliance to waste site permits
 - compliance to water use licence conditions



Conclusions

- All municipalities are faced with similar challenges
- Local nuances may require local solutions
- Certain challenges are beyond the control of municipalities
- Good planning and out-of-the-box thinking may provide solutions
- Ongoing research into local solutions
- Innovative ways to improve waste management and sanitation services is required

Thank you

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