



## TOOLS

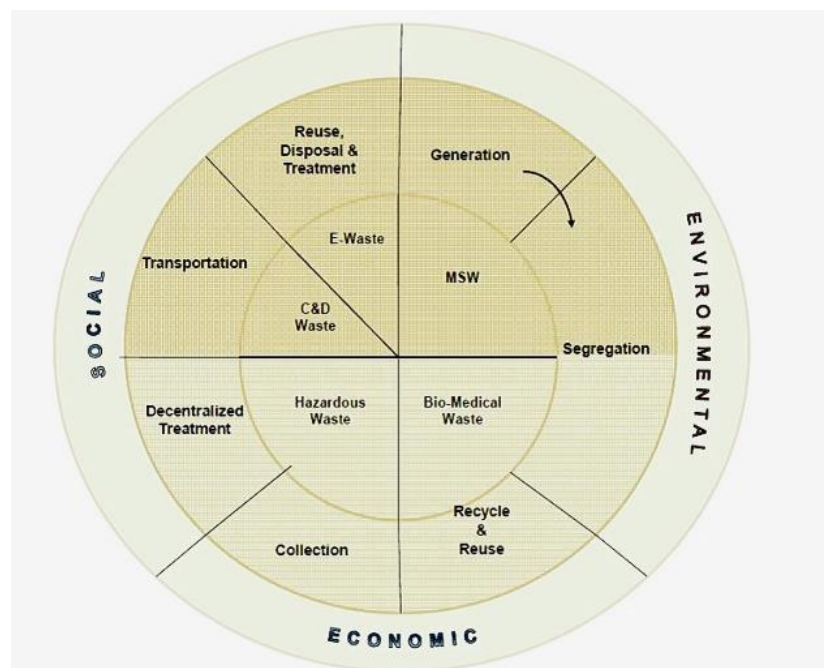


## Solid Waste Management

### Tool - Integrated Solid Waste Management Plans.

**What this tool does:** Integrated Solid Waste Management Plans (ISWMPs) are an important tool for urban management. These ISWMPs organize waste streams and processing procedures at a city-wide level. The ISWMPs will seek full waste collection coverage for a city, ensure proper application of required environmental safeguards for collection, interim storage, onward transport, disposal to sanitary landfills or incinerators or waste recycling plants (Materials Recovery Facilities - MRF).

“[D]eveloping countries face uphill challenges to properly manage their waste with most efforts being made to reduce the final volumes and to generate sufficient funds for waste management. If most of the waste could be diverted for material and resource recovery, then a substantial reduction in final volumes of waste could be achieved and the recovered material and resources could be utilized to generate revenue to fund waste management. This forms the premise for **Integrated Solid Waste Management (ISWM) system based on 3-R (reduce, reuse and recycle) principle**



**ple.** ISWM system has been pilot tested in a few locations (Wuxi, PR China and others) and has been well received by local authorities. It has been shown that with appropriate segregation and recycling system significant quantity of waste can be diverted from landfills and converted into resource.” (UNEP)



## How does it work?:

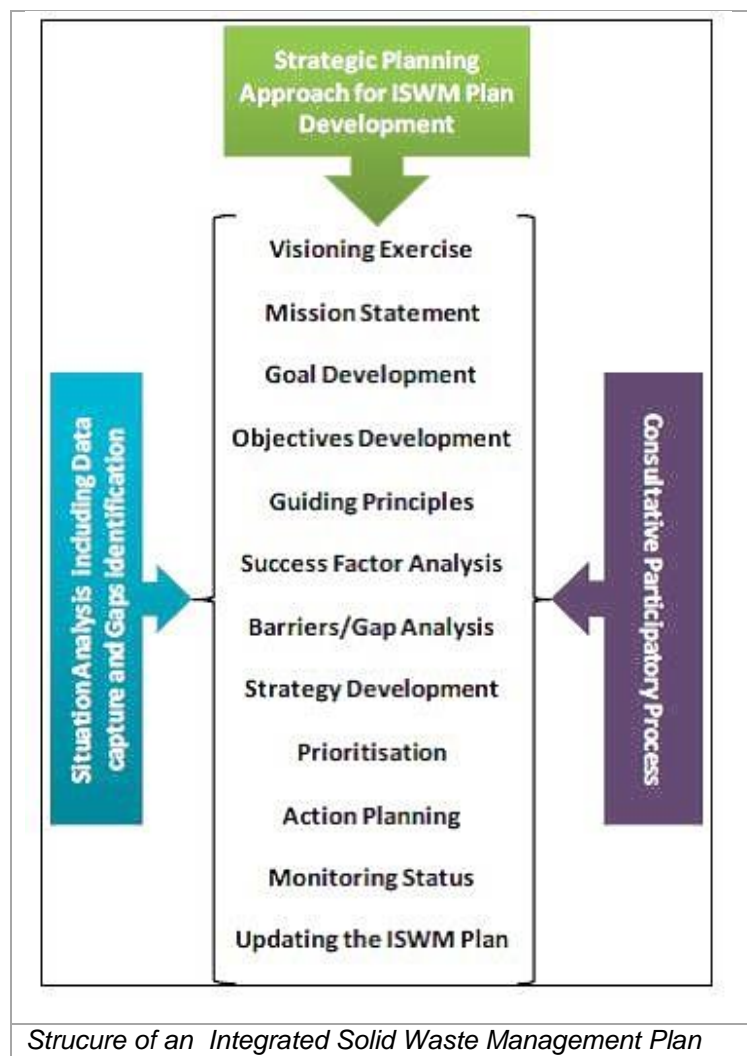
A hierarchy of planning documents – urban master plan, integrated solid waste management plan, urban landfill schedule - need to address a city's SWM aspects. A ISWMP will cover the following principles:

1. Upholding the right of every citizen to a clean and healthy environment.
2. Protection of the common public goods for current and future generations.
3. The importance of addressing economic and social value addition to waste management in terms of job creation and income generation.
4. All citizens contributing to the growing problem and the potential to be part of the solution.
5. Primary focus on the promotion and implementation of the 3-R principles (Reduction → Reuse → Recycle).
6. Awareness and education with a focus on resource reduction and waste-to-resource conversion.
7. Building upon existing local capacities and experiences.
8. Strengthening public-private partnership including community-based waste management processes.
9. Putting the necessary policy and institutional framework in place.
10. Developing a built-in adaptive mechanism for the continuous monitoring and improvement of the system. (Source : UNEP)

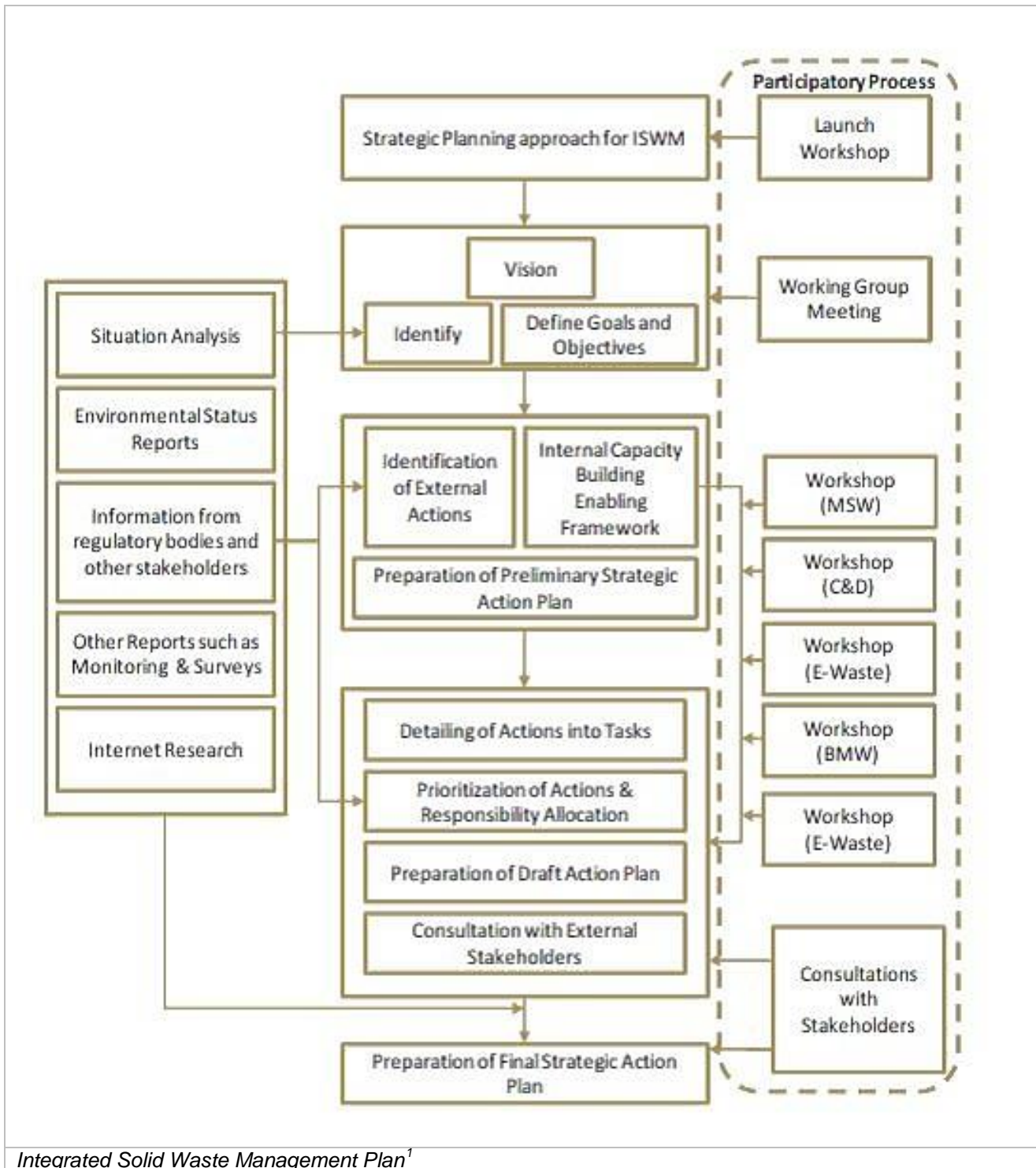
## Structure of an ISWMP

For many years, there has been a divide in how to deal with solid municipal waste. Some believe the answer is *waste management*, which is the process of managing waste that is created and implementing disposal methods that reduce harm to the environment. The second strategy is *waste reduction*, which is the process of reducing the total amount of waste produced and also using waste for alternative purposes. Which do you think is more important, managing waste or reducing waste?

Although many people have strong opinions about which strategy is preferred, there is a new plan for dealing with waste that combines the two opposing strategies. The system is called *integrated waste management*, which combines a variety of strategies for both waste management and waste reduction. Some common examples of waste management that are involved in integrated waste management are burying waste in sanitary landfills and burning waste in mass burn incinerators.



## Example for an Integrated Solid Waste Management Program



### Credentials

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### References

<sup>1</sup> UNEP. 2009. *Developing Integrated Solid Waste Management Plan – Training Manual*. Nairobi.  
[http://www.unep.or.jp/ietc/Publications/spc/ISWMPan\\_Vol4.pdf](http://www.unep.or.jp/ietc/Publications/spc/ISWMPan_Vol4.pdf)