

Institutional Analysis with respect to small-scale sanitation systems in Nepal

Anjali Manandhar
500B Solutions Pvt. Ltd.

A road-map for Decentralized Wastewater Treatment in Nepal
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National Urban Water Supply and Sanitation Sector Policy 2009

- Developed to close the policy gap on urban water supply and sanitation
- Integrated in the new umbrella Water Supply and Sanitation Policy drafted by MoPPW in 2014

Relevant strategies within the NUWSSP, 2009

- implement and promote appropriate on and off site sanitation to suit local physical environment, practises and affordability
- promote innovative forms of on-site sanitation
- re-engineer existing sewer and other sanitary systems not conforming to environmental engineering practices
- enforce standards for wastewater treatment and discharge

National Water Supply and Sanitation Policy 2014 (draft)

- an umbrella Water Supply and Sanitation Policy
- integrate existing WASH policies and laws into a single comprehensive legislative and policy framework

Strategies

- onsite wastewater treatment by hospitals, commercial establishments and industries
- use of small bore sewers to carry faecal sludge to low-cost treatment systems in small towns and peri-urban areas
- preference over low cost natural processes over conventional systems where land is cheaper
- decentralized mechanical WWTP for densely populated areas where land is expensive
- application of treated wastewater in agriculture

National Urban Development Strategy: MoUD, 2017

- 100% toilet coverage
- Priority to sewerage connection and to on-site sanitation facilities
- Indicator: functional wastewater treatment facilities in place

Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016-2030): draft (2015)

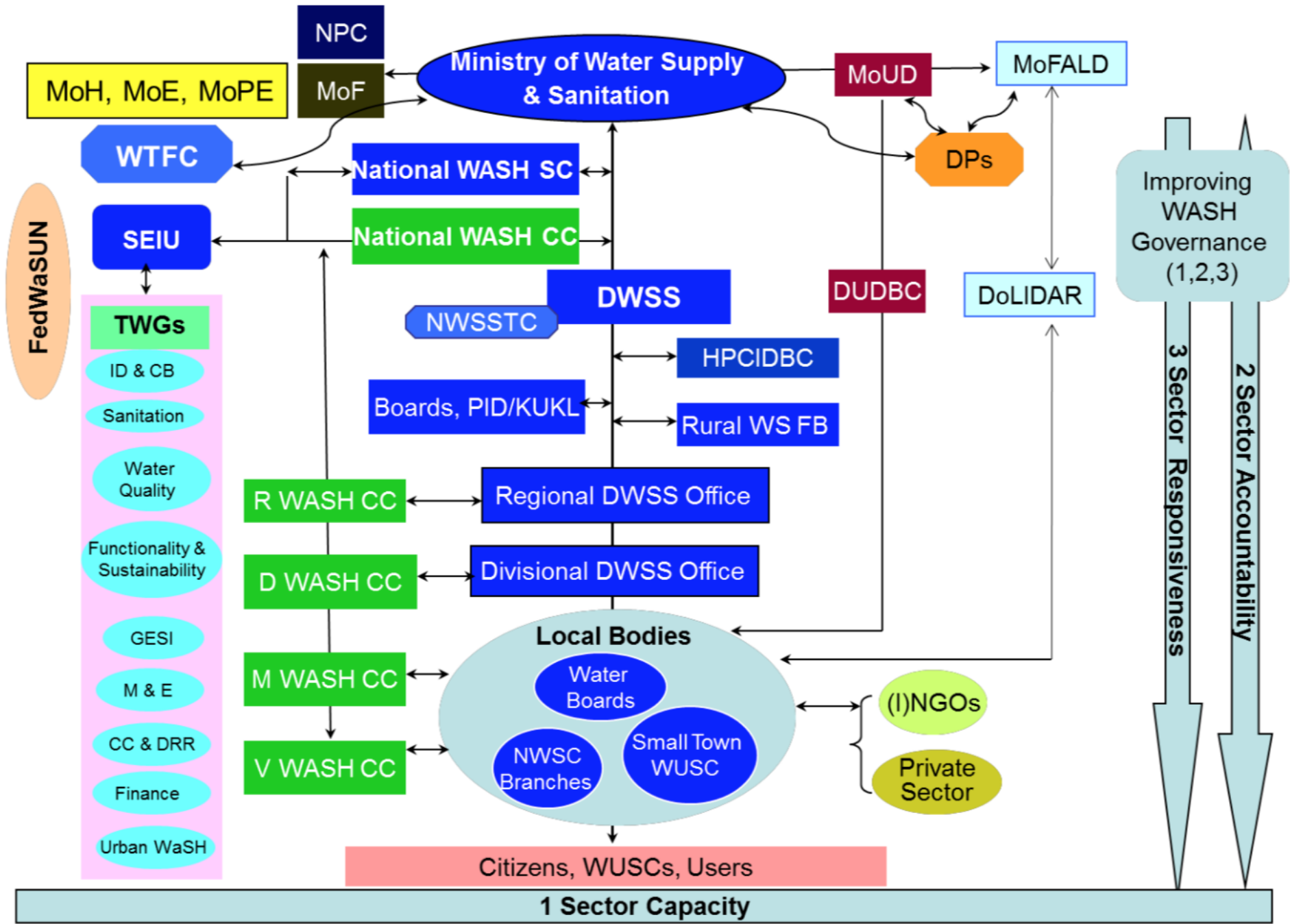
- provide a strategic programming framework and plan for action
- connection to sewer system for high-density urban areas
- onsite sanitation or DEWATS for short to medium-run for settlements unreachable by sewer
- investments in cost-effective approaches for adequate sanitation service delivery

Strategic actions for DEWATS implementation

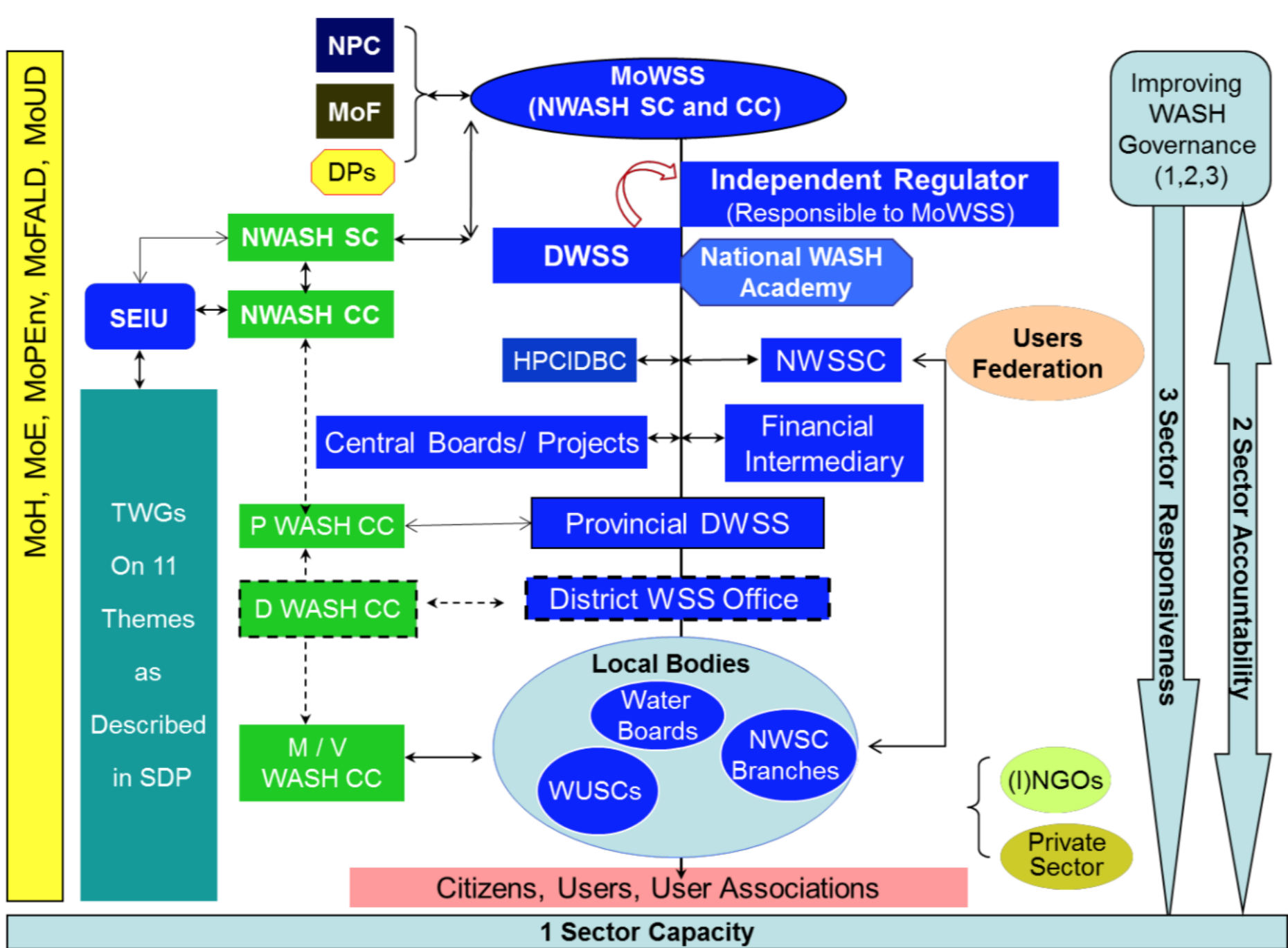
- a) guiding principle for DEWATS will be focused on quality for sustainable management

- b) set conditions must be met to implement DEWATS:
 - (i) availability of suitable Government or community land
 - (ii) community participation in design, implementation and O&M
 - (iii) community selection with no access to the centralized sewer network
 - (iv) development of O&M plan including identification of fund availability
 - (v) establishment of appropriate design criteria

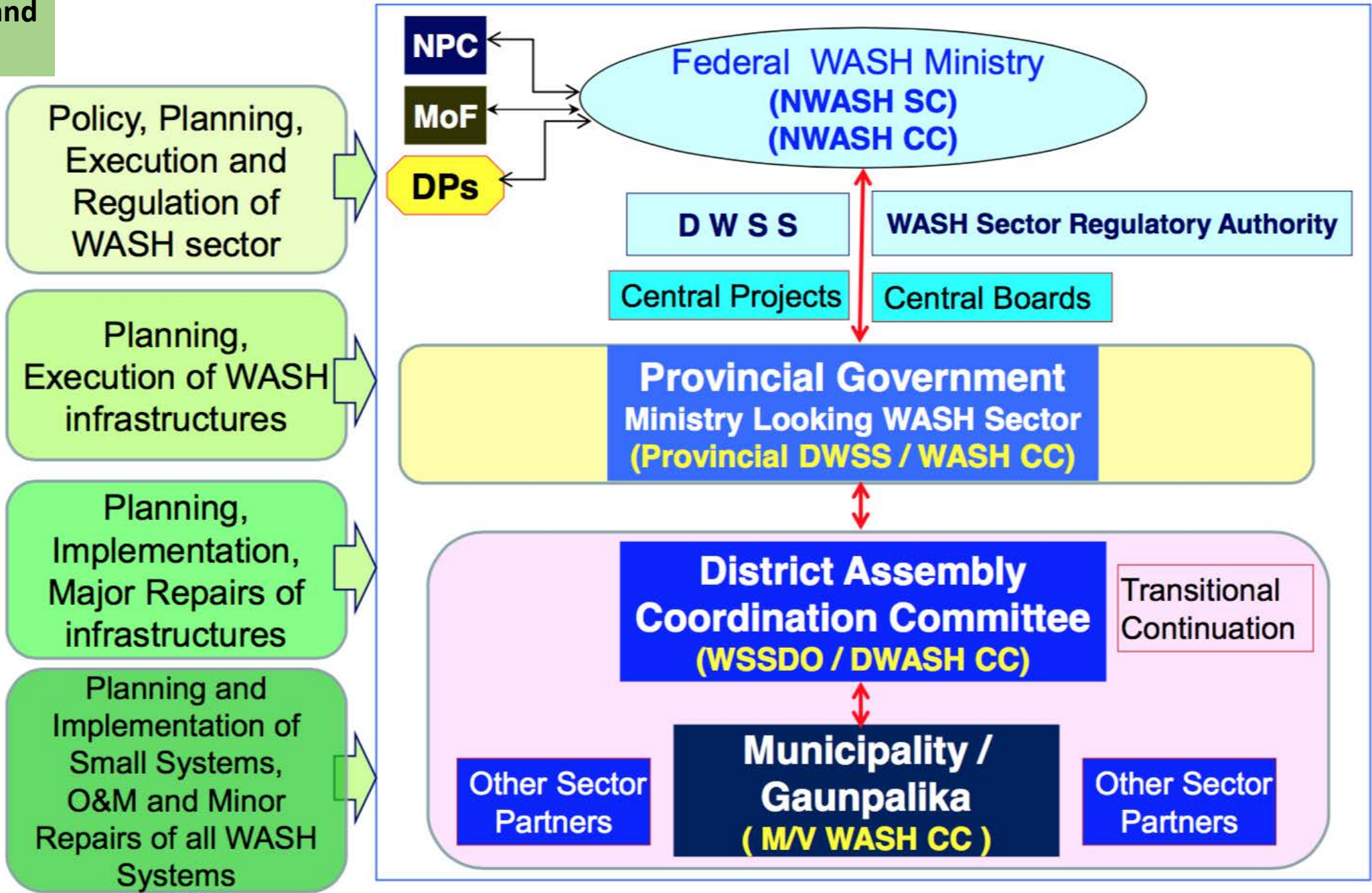
Present WASH Institutional Framework



Envisaged WASH Institutional Structure in Federal set up



Envisaged roles and responsibilities



Potential roles of institutions to scale up Dewats

Municipalities

- lead in establishing systems to treat wastewater and faecal sludge
investments in Capex or co-financing for establishment of systems
- support full or partial Opex and major repairs

NGOs

- policy influence through partnership with users and civil society
- technical designing and monitoring
- capacity building
- monitoring and data generation and management

Private sector

appropriate environment necessary

- research & development
- sanitation marketing including novel technologies
- design, construction and supervision
- Capacity building

Academia/research institutions

- research & development
- capacity building
- monitoring

Water Utilities

promote SSS system in unreached and unserved areas

Recommendations for SSS upscaling

- Operationalize SDP - resource allocations, capacity building
- Develop integrated CSP/WASH plans
- Municipality as a lead and an entry point
- Establish monitoring mechanism through independent agency like universities, NGOs or private parties
- Establish dedicated analysis and support unit for SSS and FS treatment systems
- Central level resource allocation for CapEx