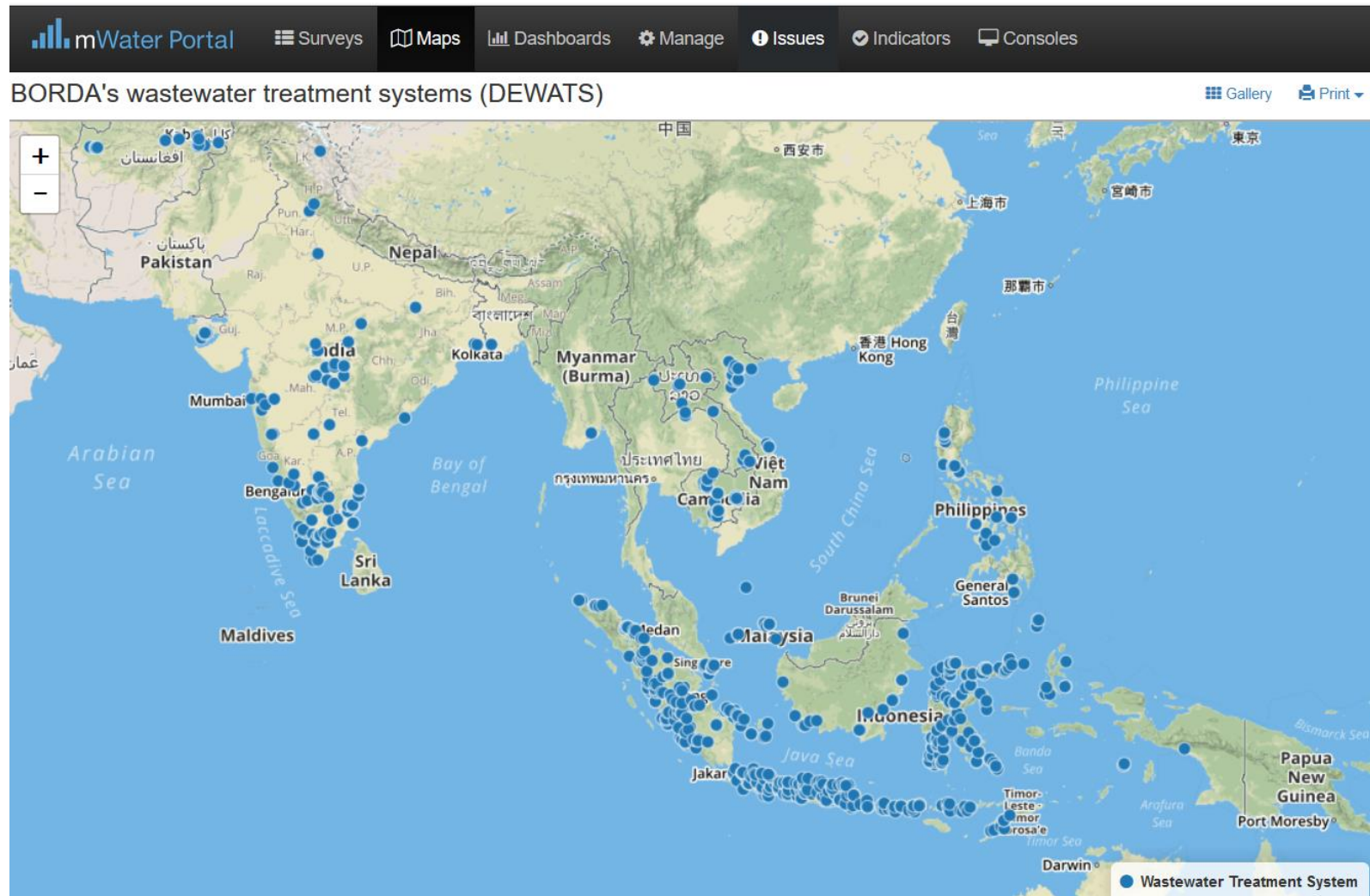


Nature-based solutions at BORDA - DEWATS

<https://tinyurl.com/borda-dewats-map>



- About 3000 systems globally; ca. 500 systems include HGF/VGF
- AFR (Lesotho, Tanzania, Zambia)
WESCA (Afghanistan, Iraq)
SA (India, Bangladesh)
SEA (Indonesia, Laos, Cambodia, Philippines, Vietnam)
- Volume ww: 0.25 up to 600 m³/d (mostly up to 30m³/d)
- Project types: Residential housing, SMEs, Institutions (hospitals, Slaughterhouses, Industries), hotels, schools, CSCs
- Funding: BMZ, UN Agencies, Ministries, local partner organisations, local municipal bodies, Clients (depending on the type of project)
- Knowledge Platform: **mWater**

CW & WW treatment - eThekweni municipality (Newlands Mashu Durban; South Africa)



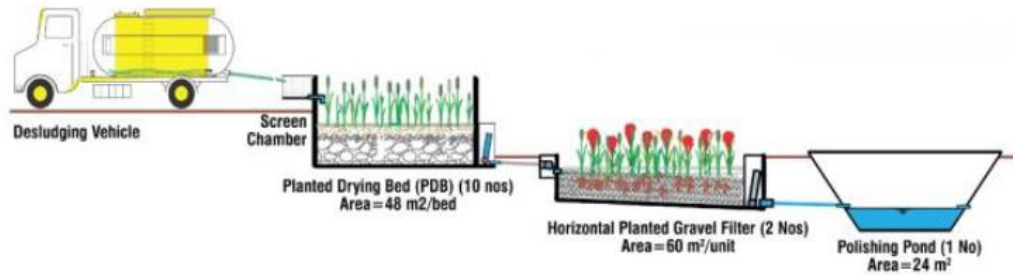
- Design/Construction/Objectives
EWS, BORDA, UKZN
- Start of operation: 2011
- Project type: Residential houses
- Population served: 90 HH

- Technicalities: Screens, Settler,
ABR, AF, HGF, VGF, drying bed
- Design hydr. load (m³/d): 41.6

- Land tenure: EWS
- O&M Funding: EWS (owner);
provides grant to UKZN (PRG)
which subcontracts work
(Khanyisa; BORDA)

- No specific ww community fees;
but gov't led tax allocation

CW & FS treatment - Leh municipality (India) (FSM PPP - DBOT); 12,000 feet High altitude



- Objectives by Municipality; BORDA, BWC
- Start of operation: 2017
- Project type: municipal level
- Population served: 30.000

- Technicalities: DEWATS & FSTP
Combination of HGF, Planted Drying Beds; polishing pond
No electricity
- Capacity (m³/d): 12 (10 units PDB)
- Capex. ~100,000 USD
O&M: < 10,000 USD/y (all by BWC)

- Land tenure: Leh Municipality
- O&M Funding: fee system (HH/SME)
Municipality -> BWC
- Performance based contracting