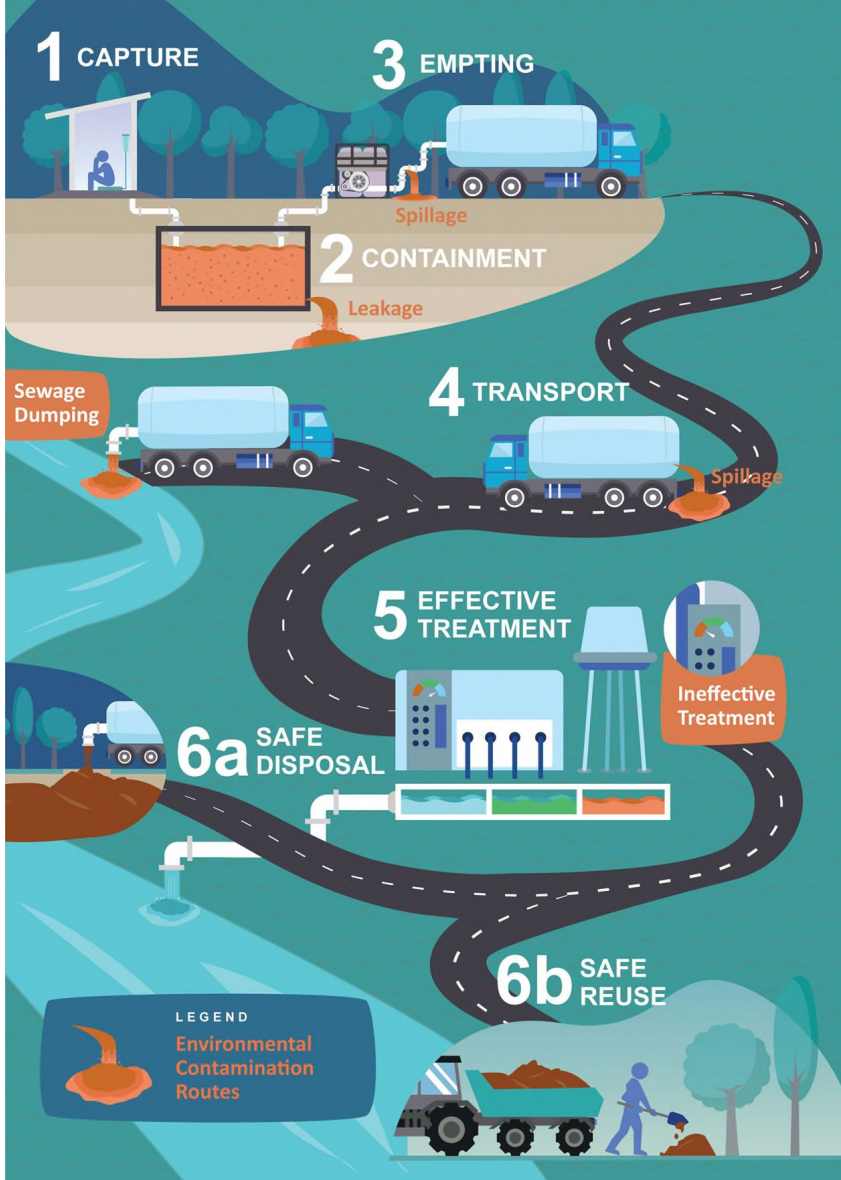


Improving Efficiency & Affordability of FSM Services MYITKYINA, Myanmar



Households Requiring Desludging Service

Waignmaw

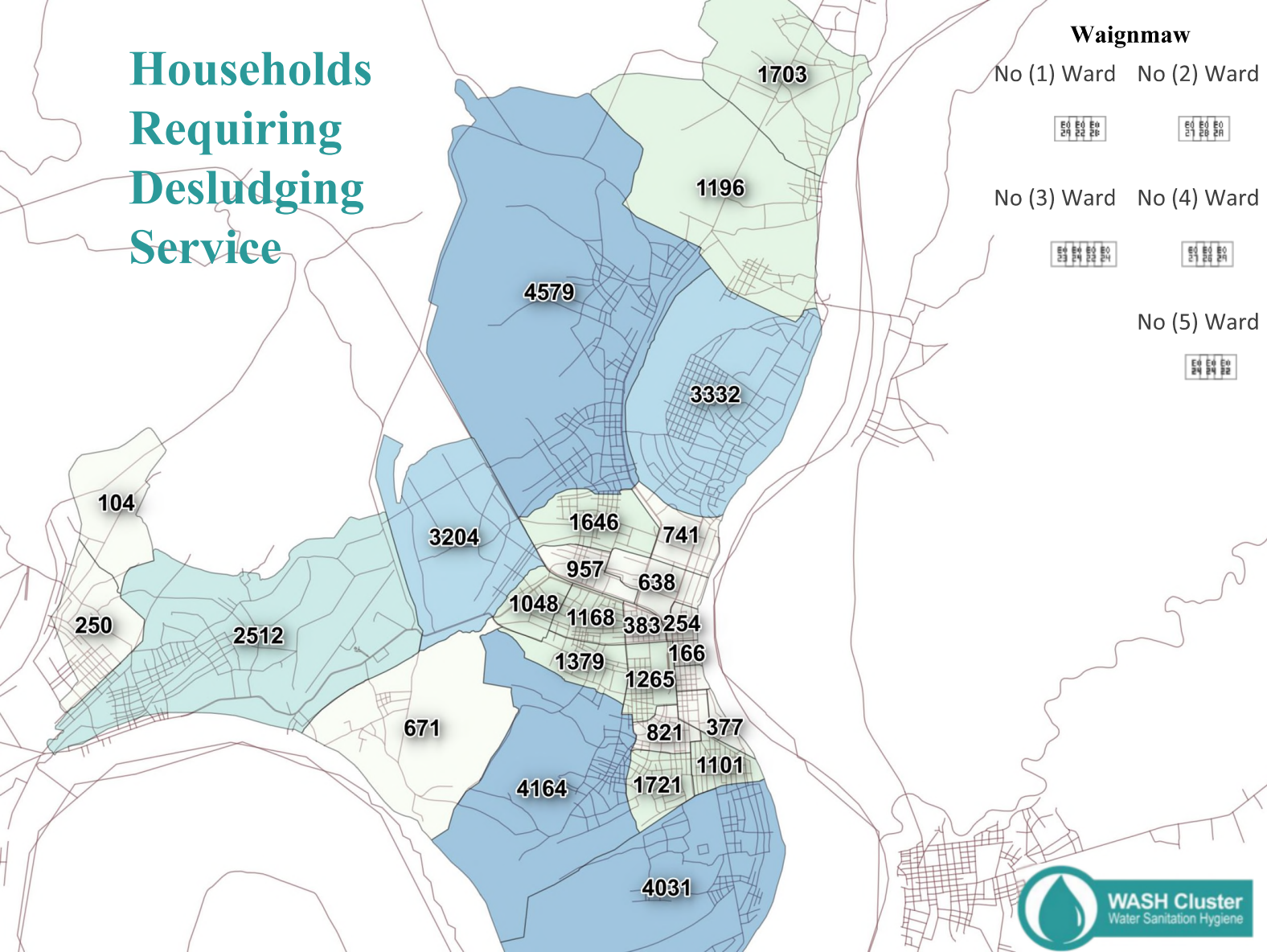
No (1) Ward No (2) Ward



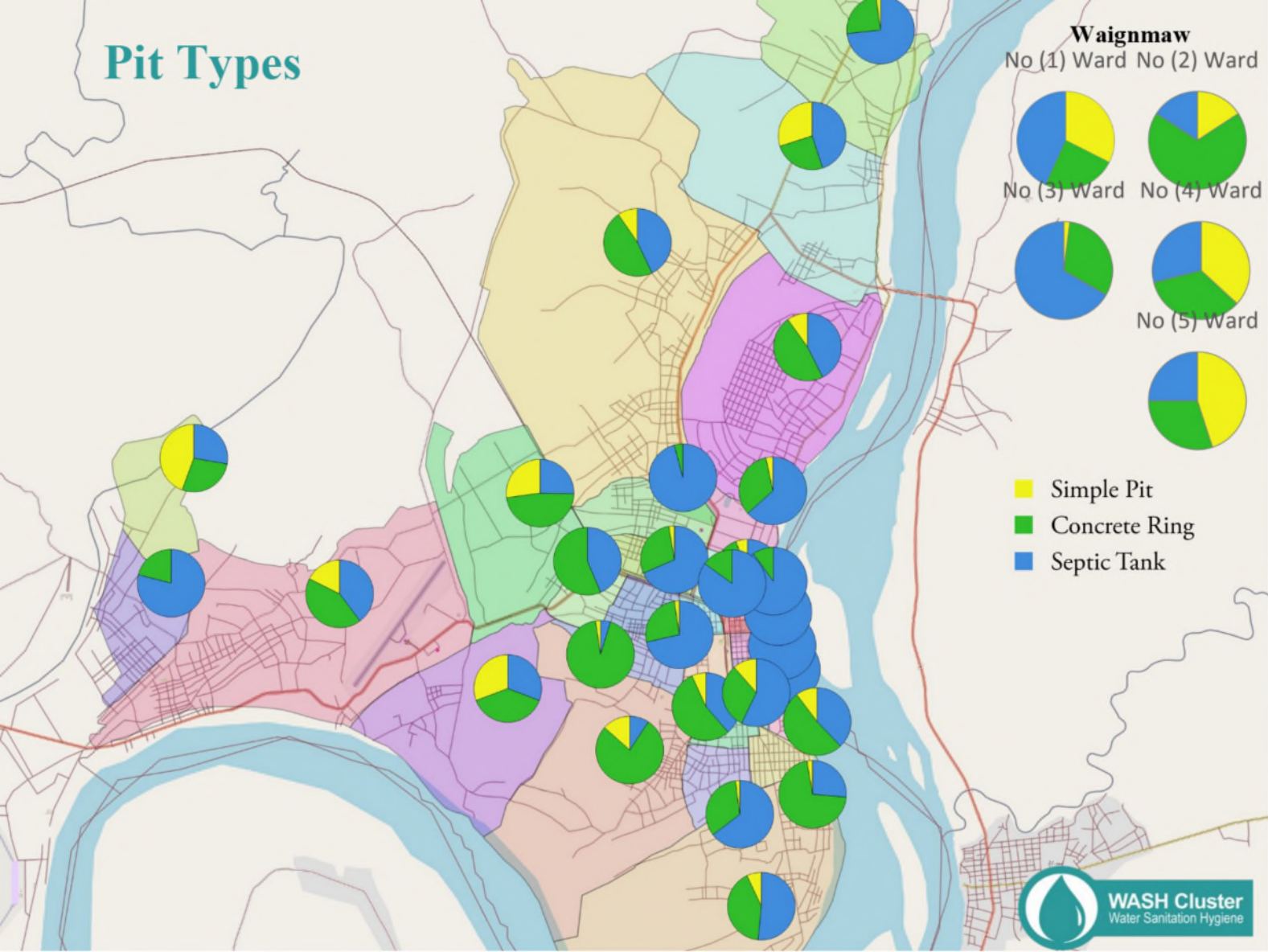
No (3) Ward No (4) Ward



No (5) Ward



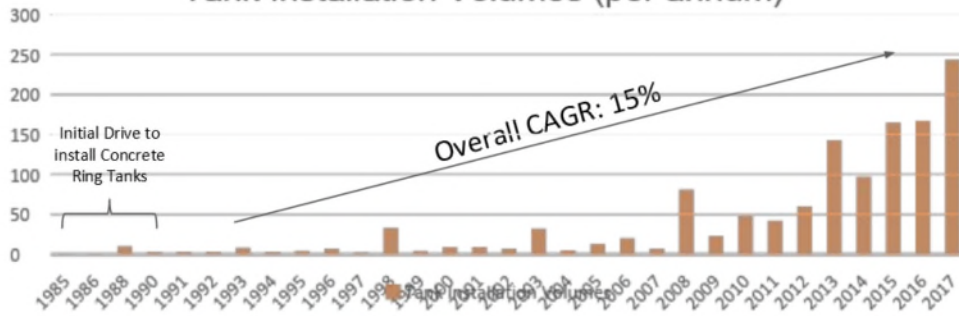
Pit Types



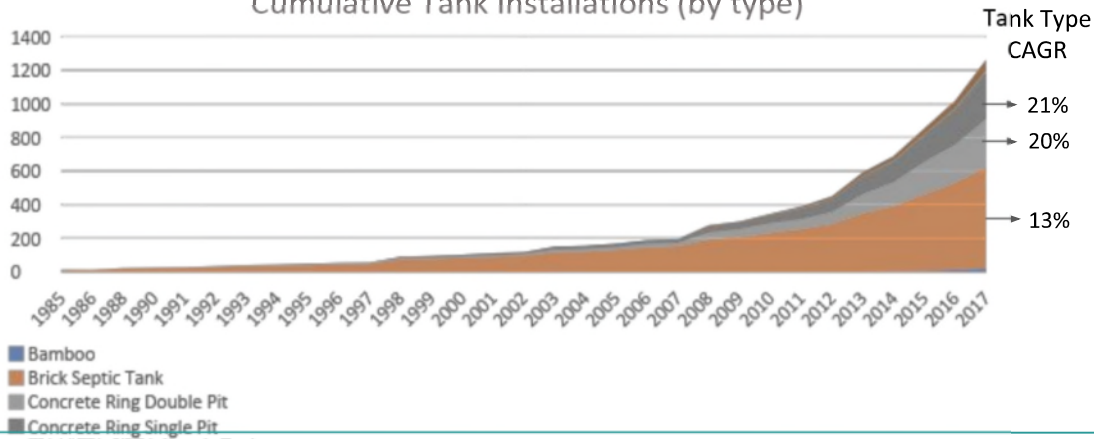
The tank market is experiencing accelerating growth driven by demand for concrete ring tanks

Tank Installations

Tank Installation Volumes (per annum)



Cumulative Tank Installations (by type)



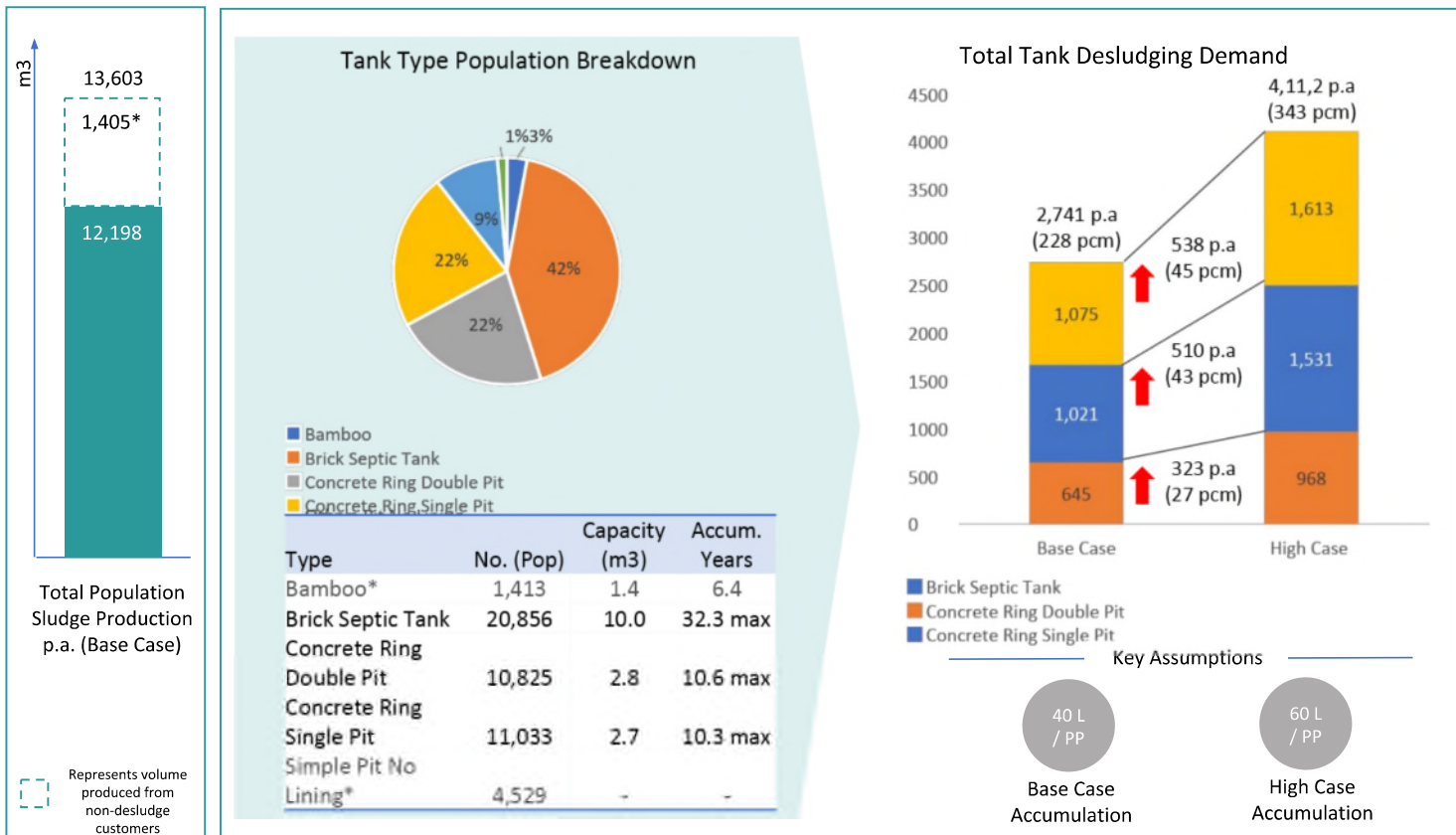
The potential demand for desludging is increasing rapidly, mostly driven by new concrete rings

The type of demand is changing – more frequent service for smaller concrete ring tanks

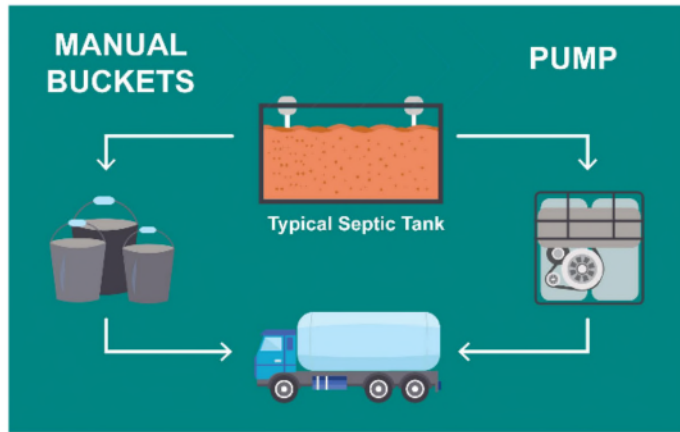
Population has grown significantly from 52k in 1983 to 300k in 2014 (+4.8% per year)



Tank Accumulation Profile



* Bamboo Pits and Simple Pit No Lining Tank types are not desludging customers



LABOUR SAVING



75%
TIME SAVING



2X
TRIPS PER DAY



80%
LABOUR COST SAVING



Current Prices

75,000 MMK

E0 OB E0 IS E0 IN E0 OC E0 OD E0 OE E0 OF E0 OG E0 OH E0 OI E0 OJ E0 OK E0 OL E0 OM E0 ON E0 OO E0 OP E0 OQ E0 OR E0 OS E0 OT E0 OU E0 OV E0 OW E0 OX E0 OY E0 OZ

130,000 MMK

E0 OB E0 OC E0 OD E0 OE E0 OF E0 OG E0 OH E0 OI E0 OJ E0 OK E0 OL E0 OM E0 ON E0 OO E0 OP E0 OQ E0 OR E0 OS E0 OT E0 OU E0 OV E0 OW E0 OX E0 OY E0 OZ

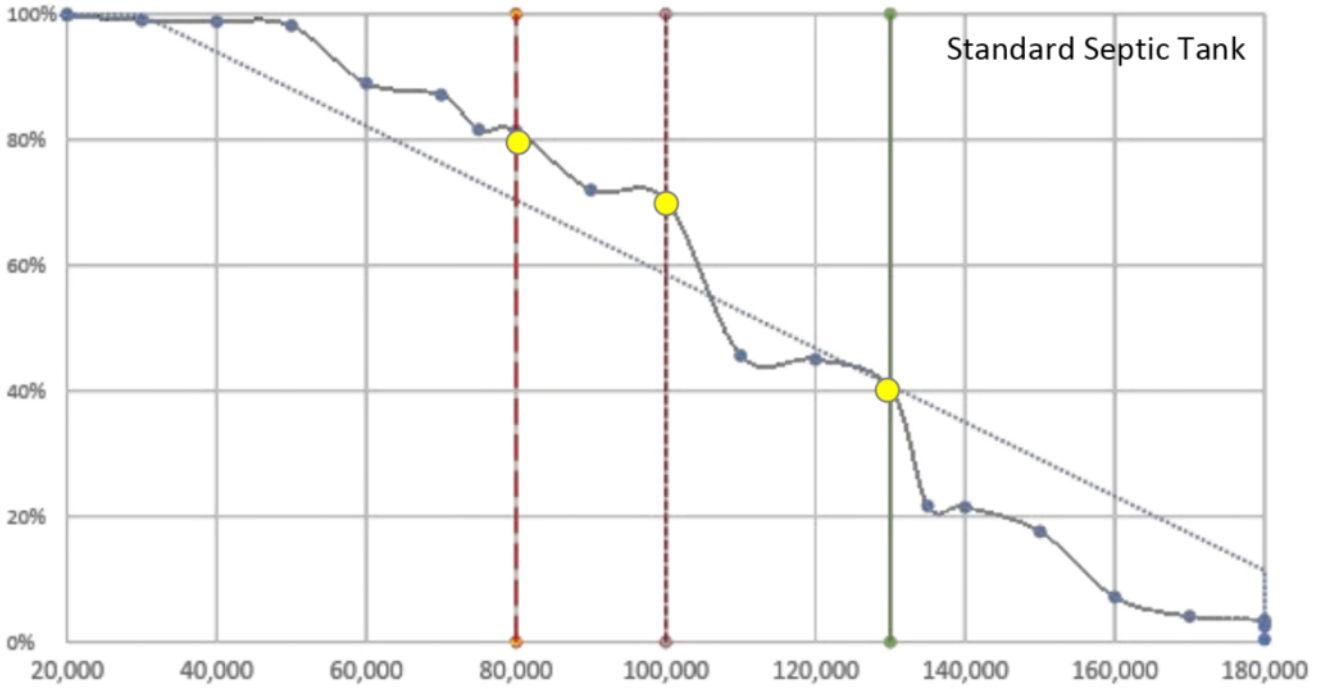
230,000 MMK

E0 OB E0 OC E0 OD E0 OE E0 OF E0 OG E0 OH E0 OI E0 OJ E0 OK E0 OL E0 OM E0 ON E0 OO E0 OP E0 OQ E0 OR E0 OS E0 OT E0 OU E0 OV E0 OW E0 OX E0 OY E0 OZ

E0 OB E0 OC E0 OD E0 OE E0 OF E0 OG E0 OH E0 OI E0 OJ E0 OK E0 OL E0 OM E0 ON E0 OO E0 OP E0 OQ E0 OR E0 OS E0 OT E0 OU E0 OV E0 OW E0 OX E0 OY E0 OZ



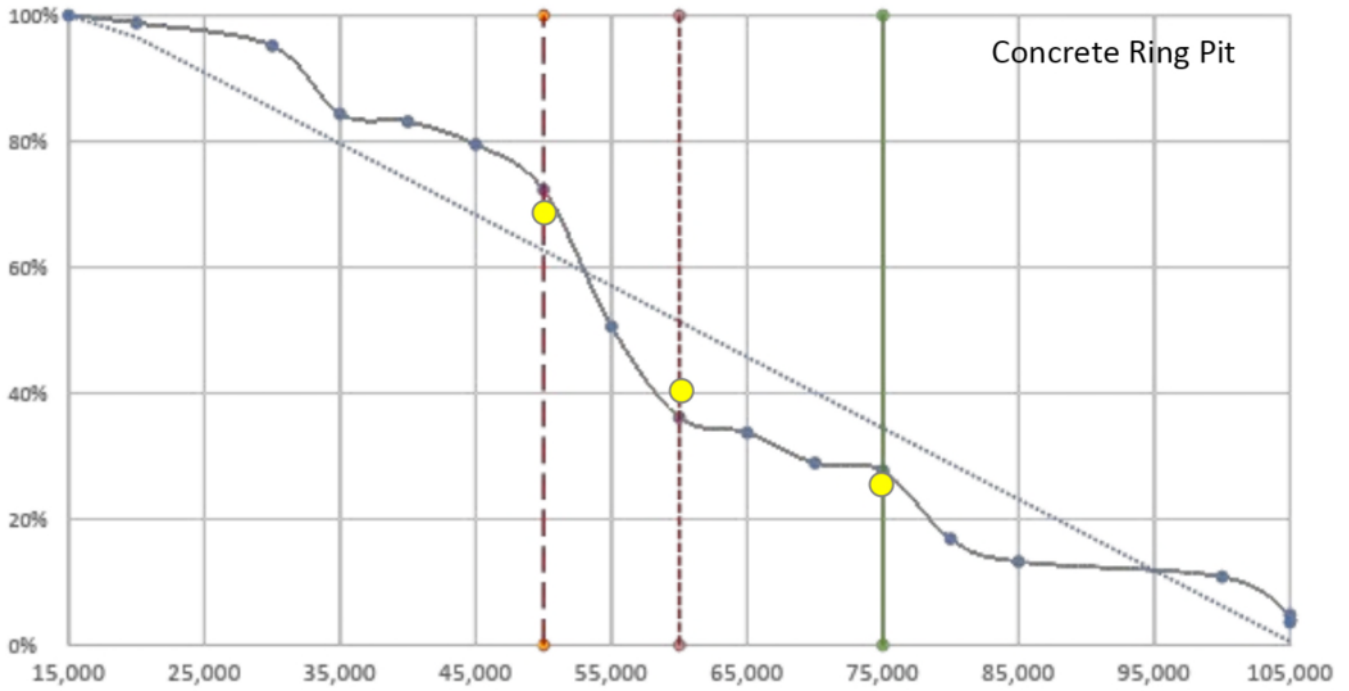
Willingness to Pay: Septic Tanks



at MMK: \approx households willing to pay (full price)
 at MMK: \approx households willing to pay (23% discount)
 at MMK: \approx households willing to pay (38% discount)



Willingness to Pay: Concrete Ring Pits



at

50,000	MMK
--------	-----

 ≈

68%	households
-----	------------

 willing to pay (full price)

at

60,000	MMK
--------	-----

 ≈

40%	households
-----	------------

 willing to pay (20% discount)

at

75,000	MMK
--------	-----

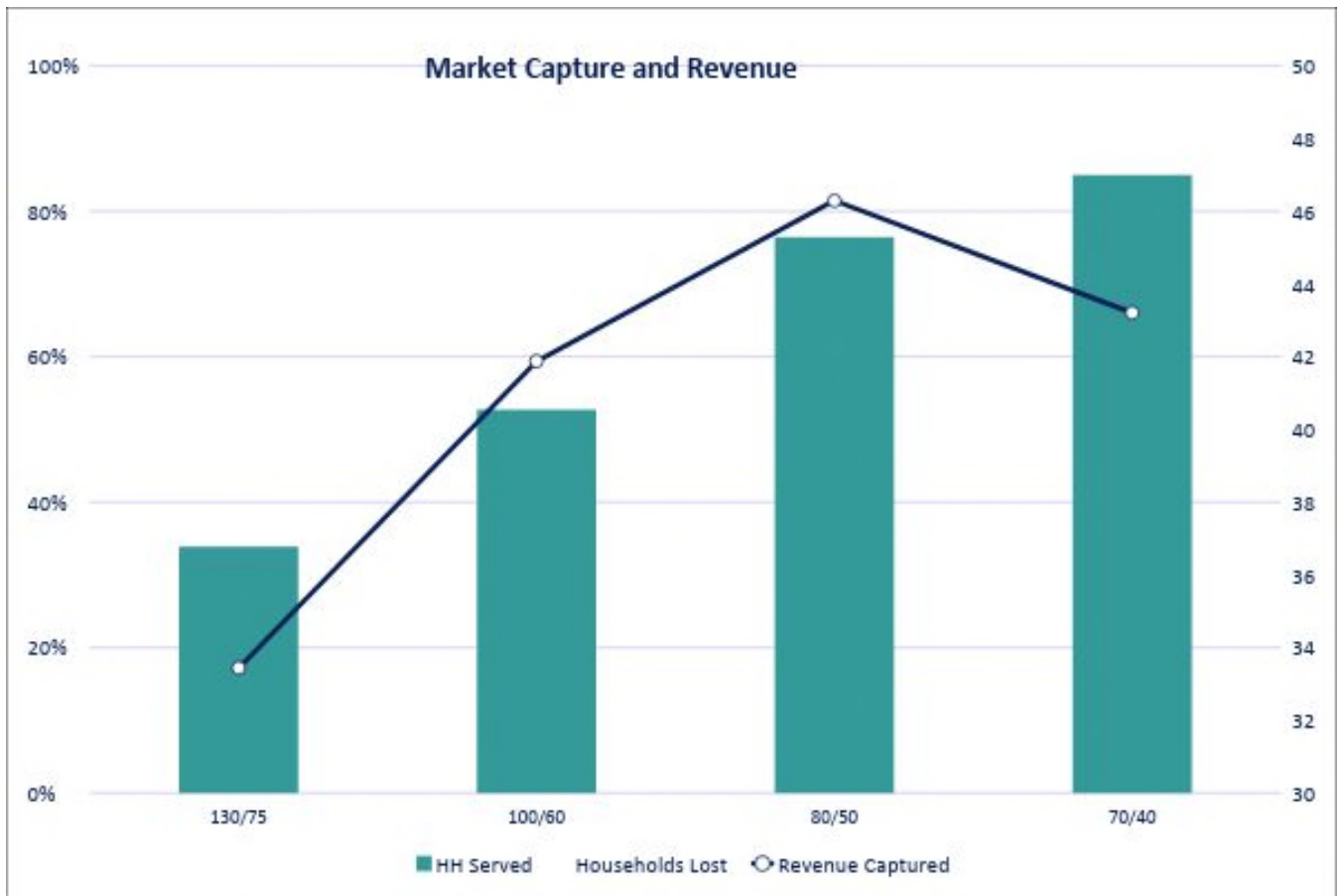
 ≈

25%	households
-----	------------

 willing to pay (33% discount)

EO 02	EO 04	EO 13	EO 08	EO 09	EO 10	EO 11	EO 12	EO 13	EO 14	EO 15	EO 16	EO 17	EO 18	EO 19	EO 20	EO 21	EO 22	EO 23	EO 24	EO 25	EO 26	EO 27	EO 28	EO 29	EO 30	EO 31	EO 32	EO 33	EO 34	EO 35	EO 36	EO 37	EO 38	EO 39	EO 40	EO 41	EO 42	EO 43	EO 44	EO 45	EO 46	EO 47	EO 48	EO 49	EO 50	EO 51	EO 52	EO 53	EO 54	EO 55	EO 56	EO 57	EO 58	EO 59	EO 60	EO 61	EO 62	EO 63	EO 64	EO 65	EO 66	EO 67	EO 68	EO 69	EO 70	EO 71	EO 72	EO 73	EO 74	EO 75	EO 76	EO 77	EO 78	EO 79	EO 80	EO 81	EO 82	EO 83	EO 84	EO 85	EO 86	EO 87	EO 88	EO 89	EO 90	EO 91	EO 92	EO 93	EO 94	EO 95	EO 96	EO 97	EO 98	EO 99	EO 100
EO 13	EO 14	EO 15	EO 16	EO 17	EO 18	EO 19	EO 20	EO 21	EO 22	EO 23	EO 24	EO 25	EO 26	EO 27	EO 28	EO 29	EO 30	EO 31	EO 32	EO 33	EO 34	EO 35	EO 36	EO 37	EO 38	EO 39	EO 40	EO 41	EO 42	EO 43	EO 44	EO 45	EO 46	EO 47	EO 48	EO 49	EO 50	EO 51	EO 52	EO 53	EO 54	EO 55	EO 56	EO 57	EO 58	EO 59	EO 60	EO 61	EO 62	EO 63	EO 64	EO 65	EO 66	EO 67	EO 68	EO 69	EO 70	EO 71	EO 72	EO 73	EO 74	EO 75	EO 76	EO 77	EO 78	EO 79	EO 80	EO 81	EO 82	EO 83	EO 84	EO 85	EO 86	EO 87	EO 88	EO 89	EO 90	EO 91	EO 92	EO 93	EO 94	EO 95	EO 96	EO 97	EO 98	EO 99	EO 100								





EO 04	EO 08	EO 12	EO 16	EO 20	EO 24	EO 28	EO 32	EO 36	EO 40	EO 44	EO 48	EO 52	EO 56	EO 60	EO 64	EO 68	EO 72	EO 76	EO 80	EO 84	EO 88	EO 92	EO 96	EO 100	EO 104	EO 108	EO 112	EO 116	EO 120	EO 124	EO 128	EO 132	EO 136	EO 140	EO 144	EO 148	EO 152	EO 156	EO 160	EO 164	EO 168	EO 172	EO 176	EO 180	EO 184	EO 188	EO 192	EO 196	EO 200
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EO 03	EO 06	EO 09	EO 12	EO 15	EO 18	EO 21	EO 24	EO 27	EO 30	EO 33	EO 36	EO 39	EO 42	EO 45	EO 48	EO 51	EO 54	EO 57	EO 60	EO 63	EO 66	EO 69	EO 72	EO 75	EO 78	EO 81	EO 84	EO 87	EO 90	EO 93	EO 96	EO 99	EO 102	EO 105	EO 108	EO 111	EO 114	EO 117	EO 120	EO 123	EO 126	EO 129	EO 132	EO 135	EO 138	EO 141	EO 144	EO 147	EO 150	EO 153	EO 156	EO 159	EO 162	EO 165	EO 168	EO 171	EO 174	EO 177	EO 180	EO 183	EO 186	EO 189	EO 192	EO 195	EO 198	EO 201	EO 204	EO 207	EO 210	EO 213	EO 216	EO 219	EO 222	EO 225	EO 228	EO 231	EO 234	EO 237	EO 240	EO 243	EO 246	EO 249	EO 252	EO 255	EO 258	EO 261	EO 264	EO 267	EO 270	EO 273	EO 276	EO 279	EO 282	EO 285	EO 288	EO 291	EO 294	EO 297	EO 300
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SOP's

The WASH cluster can support the TDA to produce the first municipal health and safety and standard operating procedures for desludging in Myanmar. The cluster can hire a specialist consultant to work with the TDA to draft and prepare the guidelines based on global best practices and TDA recommendations.



Health and Safety

WASH cluster can provide technical consultant to support TDA to develop initial preliminary designs for a STS based on the market findings. The consultant could develop report to support funding proposals



Exposure visit

Oxfam is arranging an exposure visit for TDA staff to visit a municipal desludging and treatment service in another ASEAN country. They will be able to see systems in action and talk to the local municipal staff.



Technical Working Group

The WASH cluster will continue to organize the desludging technical working group, which is attended by TDA, FDA, THD, Unicef, LNGO and INGO's. The aim of the working group is to share lessons learnt and best practices between partners.



Treatment Site

The WASH cluster can hire a technical consultant to support the TDA to develop initial preliminary designs and costings for a sewage treatment site based on the capacity requirement identified through this survey. The consultant could develop a technical report to support TDA funding proposals.



Funding Support

When treatment plant designs are developed and strong operating procedures and health and safety systems in place, the TDA will be in a strong position to look for institutional grant or credit financing. The cluster can arrange meetings with institutional donors and support advocacy for funding for a treatment plant or upgraded equipment.



Pricing Study

EY is available to provide business consultancy services to the TDA. This could include investigating which price points and operating models would be best for increasing revenue and profit while also being more inclusive. The WASH cluster can hire EY to support and work directly with the TDA if requested. They can create a detailed operational financial model which would provide strong support for any institutional funding requests.



Equipment Support

The cluster can work with the TDA to create a list of technical equipment, or repairs, that would improve desludging services. This could include new pumps or truck repairs for example. Oxfam has tested several different desludging pumps in Myanmar and can share experiences. The cluster can then support the TDA by helping to identify partners who may be able to provide funding for such items.