

Year	New Community Projects				Existing Pump Repair
	Wells	Rehab	Catchment	Washrooms	
2015	75	11	0	0	509
2016	102	10	0	5	661
2017	129	18	6	3	588
2018	120	13	3	7	375
2019	94	2	17	2	352

This graph shows project totals over time. New Community project types include drilled wells, rehabilitated old abandoned wells, water catchment projects, and washroom facilities. Pump repairs are reported separately as they represent work done to repair existing hand pumps at previously serviced communities to get safe water flowing again.

In 2019, there was a decrease in well production over previous years. This was caused by frequent breakdown of aging drill rigs and trucks in Liberia and Haiti. These issues will be addressed in the coming year by repairs and, where necessary, replacement.

One of the issues that emerged from this experience was the realization that preventative maintenance is a foreign concept in countries where people grow up without enough money to cover needed expenses. In this climate, it makes no sense to spend money on something that is not broken. As a result, drill rigs and trucks break down at inconvenient times and locations, requiring time-consuming repairs or extractions from distant villages or barely navigable jungle roads. Work has been planned in the coming year to build an inventory of critical parts that are not locally available and to set-up funding ledgers to designate funds for equipment maintenance and repair.

Less wells were rehabilitated in 2019 because of a shortage of handpumps in Haiti. All available pumps were required on existing newly drilled wells to ensure that boreholes were not left open to be inadvertently destroyed by children playfully dropping branches and rocks into the well casing! To address this situation in the coming year, additional pumps will be purchased from the supplier in India and an inventory management system will be put in place. This will help the local team determine when to place the next pump order, since it takes up to 6 months for pumps to arrive in Haiti.

Over time, teams in all countries have noted that there is a general lack of care for communal washrooms in village settings caused by conflict over who will keep them clean. As a result, washroom construction is currently being limited to clinics, schools, orphanages or churches. In the longer term, work will focus on introducing family-level, small scale washrooms for use in village settings.

In 2017 & 2018, pilot projects were conducted with roof-top water catchment tank projects in small rural communities in Northern Kenya. These projects are initiated by local women's self-help groups who are responsible for project planning, including at which homes the tanks should be installed, cleaning roofs, and helping save and contribute 5-10% of the project budget. These projects all serve remote communities of less than 300 people which is within Lifewater's long-term definition of

sustainable water projects. In 2019 the number of catchment projects increased and will be increasingly supported in years ahead.