Figure 10: Gautam Shah, Mayor of Ahmedabad, paints the first cool roof coating in the city, May 2017 (IIPH-G)

The pilot in Ahmedabad builds on ongoing efforts by leading groups in the city. For example, the **Mahila Housing SEWA Trust (MHT)**, a non-profit organization, has installed over 250 cool roofs in low income communities in Ahmedabad, using a material called ModRoof – roofs made of coconut husk and paper waste – as an alternative to concrete roofs.[58] According to MHT, these modular roofs provide greater cool roof benefits than regular roof materials and data collected from installed sites showed indoor air temperature being lower by 7-8°C (12.6 – 16.4°F), as compared to conventional concrete roofs. A 2017 study by MHT, NRDC and IIPH-G found that at 1:00 pm the ambient temperature of homes with mod roof were approximately 4.5°C lesser than other control roofs. The study compared the indoor ambient temperature of the households that implemented cool roof techniques with the support of Mahila Housing SEWA Trust (MHT) against the controls. Modular roofing system, solar reflective white paint on tin roof, air lite ventilation on tin roof and thermocol sheet insulation beneath asbestos have been compared against roofing of control households: tin, asbestos/cement sheet and concrete in the slums across Ahmedabad. The study was conducted in 16 households during September 2017. [59]

Figure 11: ModRoof installation in Ahmedabad by Mahila Housing SEWA Trust (Mahila Housing SEWA Trust, 2016)

[58] Mahila Housing SEWA Trust, "*Building Climate Resilience Capacities of Urban Poor in South Asia - Compendium of Solutions*", Global Resilience Partnership (accessed on 07 July 2017)

[59] Mahila Housing SEWA Trust, "*Research Report: Combating Climate Change Induced Heat Stress: Assessing Cool Roofs and its Impact on the Indoor Ambient Temperature of the Households Across Slums of Ahmedabad*", 2018 (accessed on 02 May 2018)