This paper describes the process of setting up community-based organizations (CBOs) of sex workers during the 5-year community mobilization initiative of the Swagati project, an HIV prevention programme in nine coastal districts of Andhra Pradesh. METHOD: The Swagati project facilitated the formation of 11 CBOs through partnerships with local non-governmental organizations and meetings with groups of sex workers. Activities included peer-led outreach, information campaigns, institution building through community committees and capacity building for organizational development. RESULTS: In 2010, a Community Ownership and Preparedness Index tool assessed the CBOs in terms of leadership, democratic governance, decision making and others qualities. All except two CBOs scored in the 'promising' category. One of these CBOs moved to promising stage by the year 2011 indicating good progress, considering how recently they were established. The Community Ownership and Preparedness Index assessments of organizational strengths showed wide variations among the CBOs, despite the essentially similar organizational steps taken by the Swagati programme. A Behavioral Tracking Survey (2010) of individual CBO members also showed district-level differences in sex workers' expressions of confidence in collective action, participation in organizational activities and other indicators. CONCLUSION: Mobilizing marginalized populations such as sex workers to form CBOs is a complex process and can be affected by many influences, including the qualities of CBO leadership. Although the CBOs have not yet reached full 'maturity', they have made significant improvements in terms of collectivization and its translation into collective action as reported by individual sex workers.