

WHY WE'RE POSSIBILISTS

"I'm a very serious "possibilist." That's something I made up. It means someone who neither hopes without reason, nor fears without reason, someone who constantly resists the overdramatic worldview. As a possibilist, I see all this progress, and it fills me with conviction and hope that further progress is possible. This is not optimistic. It is having a clear and reasonable idea about how things are. It is having a worldview that is constructive and useful." —Hans Rosling

iDE's in-house measurement, evaluation, and learning teams in field offices and at our HQ contribute to an organisation-wide data driven culture that supports and needs rigorous data, evidence, and knowledge. There is an expectation among our workforce that we will link the anecdotal field experiences with hard data and evidence to be able to make sound decisions and effectively communicate our results. iDE carries out data-collection processes and research to understand if

what we're doing really matters, and whether we're having a positive effect on outcome areas of interest. Data from our management information systems combined with evaluation, statistical analysis, and human-centered design insights allows iDE to obtain robust statistics about social and economic outcomes. This poster provides an overview of some of the research initiatives we are currently working on.

iDE
 Christopher Nicoletti
 Director of Global IQ
 cnicoletti@ideglobal.org
 ideglobal.org

1 VIETNAM HAND HYGIENE CONTEST EVALUATION



POP QUIZ! Hand Hygiene Contests as a Way of Increasing Knowledge Retention and Practice at Scale in Rural Vietnam: Evidence from a Quasi-experimental Impact Evaluation

BACKGROUND Contests are a popular and scalable way of sharing information with large numbers of households in Vietnam, but they have not been used for sanitation or hand hygiene behavior change. In 2017, iDE implemented a hand hygiene contest in two provinces, whereby 56,973 members of the Women's Union and their family members completed a hand hygiene quiz. Those who answered all questions correctly and gave the closest estimate of the number of participants to complete the quiz from their community received a small prize. A quasi-experimental impact evaluation tested whether the hand hygiene contest had an attributable effect on hand hygiene knowledge retention and practices, and whether ownership of an improved sanitation facility had an incremental effect on knowledge and practice.

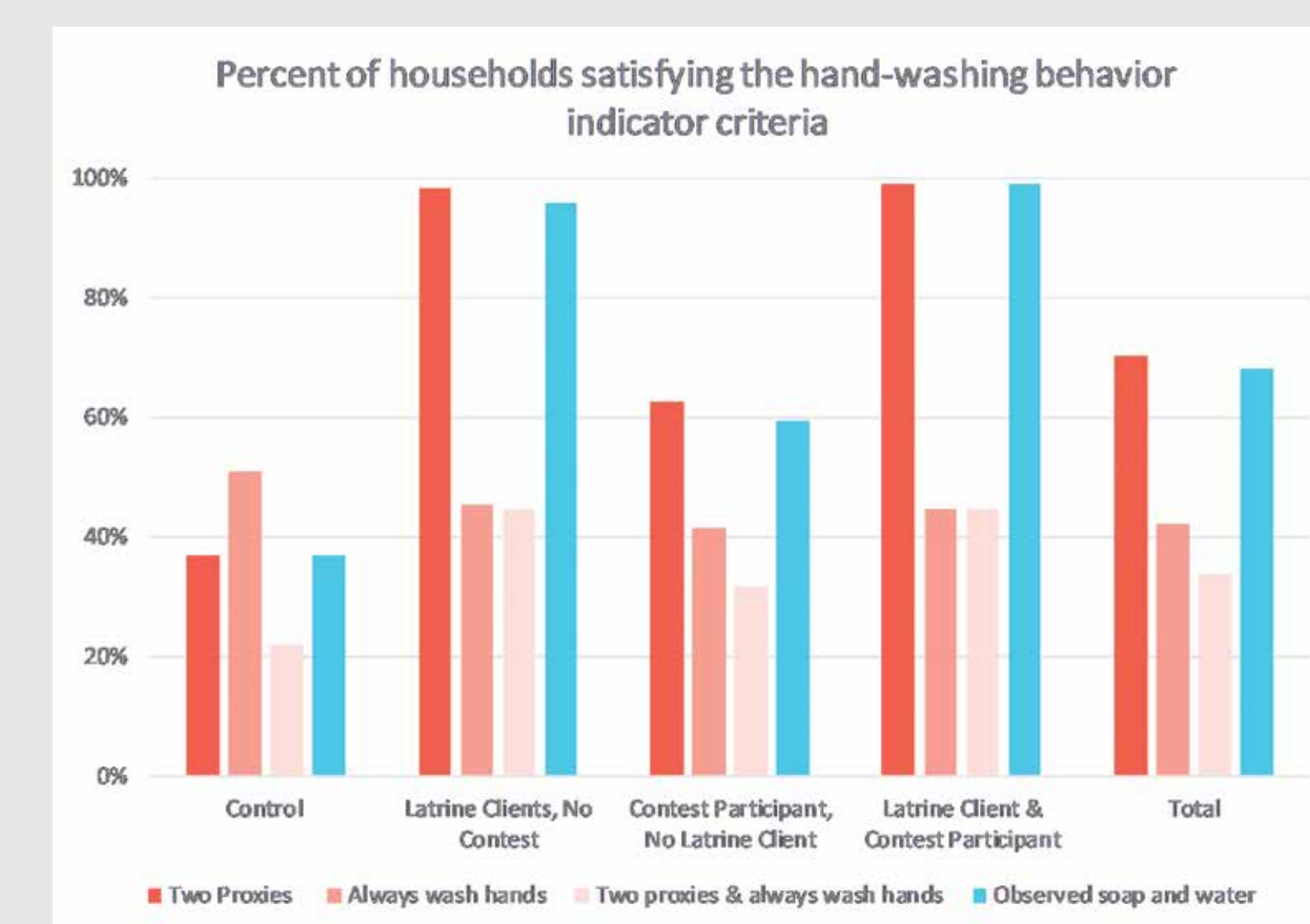
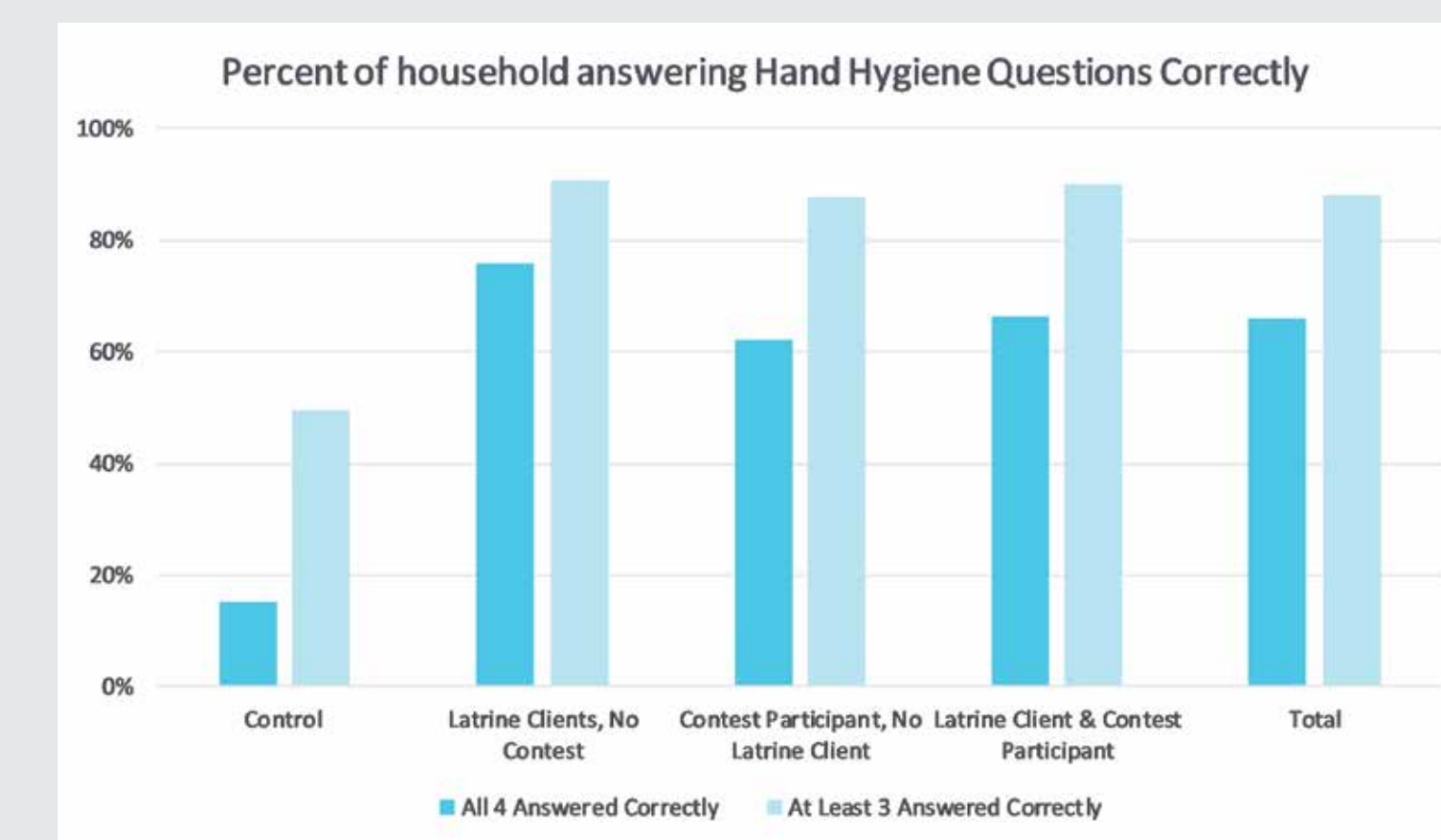
RESEARCH QUESTIONS

- **Are contests an effective way of increasing hand hygiene knowledge in rural Vietnam?**
- **Are contests an effective way of changing hand-washing behavior in rural Vietnam?**

METHODS A multi-stage clustered sample of 925 households were surveyed from three experimental groups: 1) contest participants with no improved sanitation facility, 2) contest participants with an improved sanitation facility, and 3) counterfactual group from a matched set of districts outside of the intervention areas. Multiple knowledge and practice indicators were analyzed, including: answering all four hand hygiene knowledge questions correctly, and presence of soap and water plus the respondent claiming to wash his/her hands after defecation.

RESULTS Pairwise hypothesis tests show that contest participants had a 47 percentage point increase in hand hygiene knowledge retention and that owning an improved sanitation facility increased hand hygiene retention by 13 percentage points. When looking at hand hygiene practices, the contest had a significant effect equal to 22 percentage points, and ISF ownership increased this effect by 37 percentage points.

LAST WORDS This study shows that contests may be an effective and scalable way to transfer knowledge and elicit behavior change in rural Vietnam. Results suggest that ISF ownership has a much larger effect on hygiene practices than just participating in the contest, but that the contest alone can improve hygiene practices.



2 MEASURING THE EFFECT OF IDE'S SANITATION MARKETING INTERVENTION ON LATRINE COVERAGE AND HEALTH



Scaling up Sanitation Marketing to Reach SDGs 3 and 6: Evidence from a Research Study in Rural Cambodia from 2009 to 2014

BACKGROUND iDE's sanitation marketing program activates the private sector to produce, sell, and promote latrines to expand access to underserved households. iDE's Cambodia program has sold over 280,000 improved pour-flush latrines, significantly making progress against SDG Goal 6 of ending open defecation through adequate and equitable sanitation. New research estimates the extent to which iDE toilet sales have moved the Cambodian population towards an ODF society as measured by latrine coverage rates. Further, we recognize that the sector has mixed evidence measuring the contribution of improved sanitation to positive health outcomes, and thus reduced mortality rates, as framed in SDG Goal 3. This research provides an additional piece of evidence for consideration as it estimates the health impacts of iDE's sanitation marketing program in Cambodia.

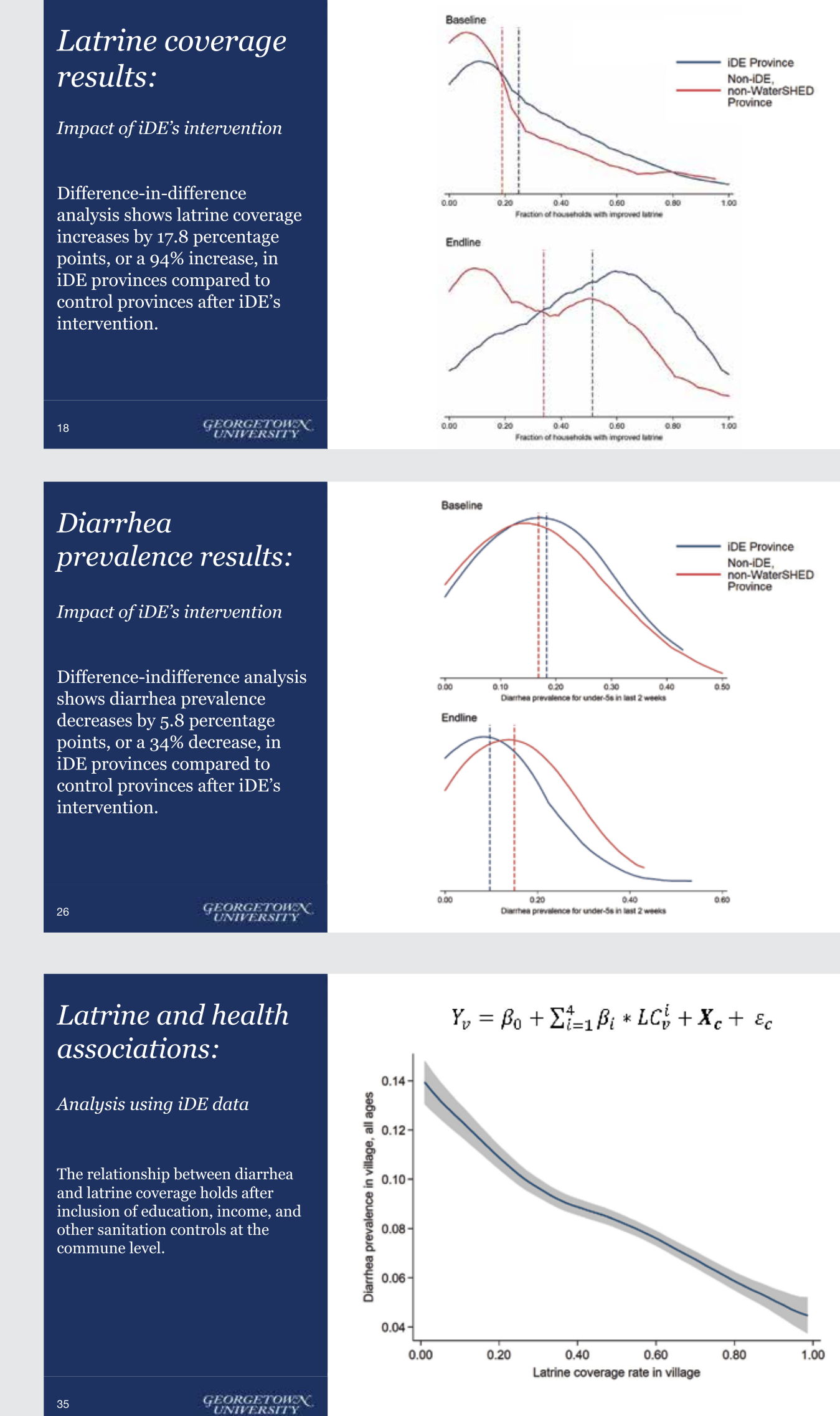
RESEARCH QUESTIONS

- **Did iDE's Sanitation Marketing program lead to attributable increases in latrine coverage over the period 2010 - 2014?**
- **Did iDE's Sanitation Marketing program lead to attributable improvements in health outcomes over this period?**
- **Are improvements in health associated with latrine ownership or coverage rates?**

METHODS A quasi-experimental research study of primary and secondary data sources used difference-in-difference models to measure iDE's causal impacts on changes in latrine coverage at the commune- and district-levels. Difference-in-differences analysis also estimated the effect on health outcomes at the district level. Fixed effects and multivariate regression models estimated the causal relationship between latrines and health, specifically looking at rates of diarrhea prevalence among children under five.

RESULTS The study finds that iDE's intervention led to increases in latrine coverage by 17.8 percentage points over the period of 2010 - 2014. We also find significant results that after iDE's intervention, rural diarrhea prevalence in target areas decreased by 5.8 percentage points, or a 34% decrease. Finally, we find that increased latrine coverage in villages is associated with decreased rates of households experiencing diarrhea.

LAST WORDS This study shows with statistical significance that iDE's sanitation market development work is directly related to large changes in coverage and a decrease in diarrheal disease, thereby substantively making progress towards SDG Goals 3 and 6.



3 TARGETED SUBSIDIES IN CAMBODIA

Do targeted, partial latrine subsidies increase latrine sales to poor households? Non-poor households? And, are they cost-effective?

COUNTRY Cambodia
METHOD Randomized Control Trial + Cost-efficiency Analysis
PARTNERS Causal Design, Australian Aid
TIMELINE Completed - Drafting manuscript

4 MULTIDIMENSIONAL INDICATOR FOR MEASURING WOMEN'S EMPOWERMENT IN WASH

How can a multi-dimensional index, complemented by qualitative approaches, generate evidence on attributable impacts of WASH on gender equality?

COUNTRY Cambodia and Nepal
METHOD To be determined
PARTNERS Institute for Sustainable Futures, Australian Aid, East Meets West, SNV
TIMELINE 2020

5 EXPANDING THE ROLE OF WOMEN IN SAMA SAMA'S SANITATION VALUE CHAIN

How might we involve women in the Sama Sama sanitation value-chain for long-term sustainability and provide income-generating opportunities for their households and communities?

COUNTRY Ghana
METHOD Human Centered Design (HCD)
PARTNERS iDEsign
TIMELINE End of 2018

6 WASHPALS RESEARCH IN NEPAL

How does a sanitation sales agent's gender influence end-user hygiene and sanitation behaviors as related to purchase, installation, and use?

COUNTRY Nepal
METHOD Mixed-methods
PARTNERS WASHpals
TIMELINE End of 2018

7 FECAL SLUDGE MANAGEMENT INTENTIONS RESEARCH

How do rural latrine owners in Cambodia intend to manage their fecal sludge, and what contextual factors affect these intentions?

COUNTRY Cambodia
METHOD Combined Cross-sectional and Longitudinal Statistical Analysis
PARTNERS James Harper, PhD Candidate in Civil Engineering at University of Colorado
TIMELINE Completed - Manuscript submitted