

THE IMPORTANCE OF DELIVERING THE RIGHT EDUCATIONAL MESSAGE

An anthropological study about the use of DV-UD latrines in the Bolivian Andean Region



For



The study's objectives

- ◆ To determine the level of usage of the eco-san latrine at household and school level.
- ◆ To identify cultural and other factors that limit the adequate use of the eco-san latrine.
- ◆ To provide recommendations regarding the aspects that need to be adjusted in base of the study's results.



UNICEF BOLIVIA

PROANDES

AMAZONIA

➤ Beneficiaries:

- 5.617 household eco-san lat.
- 433 school eco-san latrines



The model:
Urine Diverting
Double Vault
Dry latrine



Balancing quantitative-qualitative techniques

Quantitative:

- ◆ 181 Household surveys and latrine technical inspections
- ◆ 223 School surveys and 29 latrine technical inspections

Qualitative:

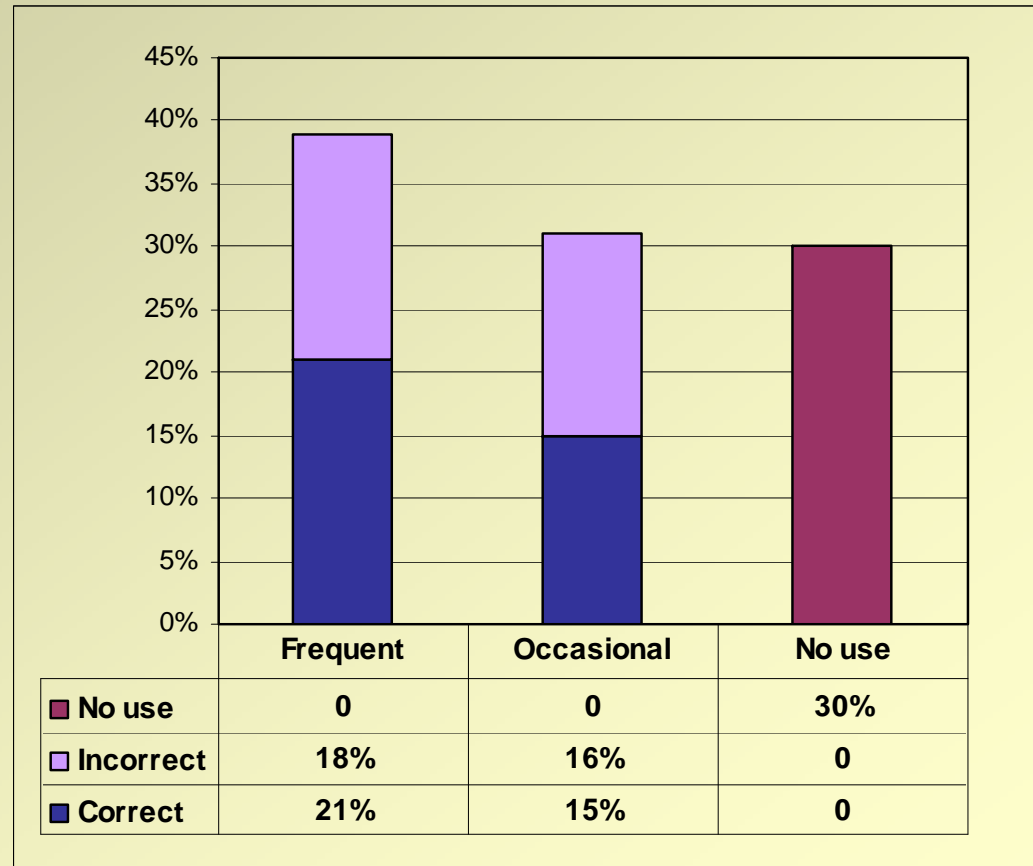
- ◆ 45 household participative observations
- ◆ 45 Semi-structured interviews



Summary of Findings

→ Frequency and Quality of use

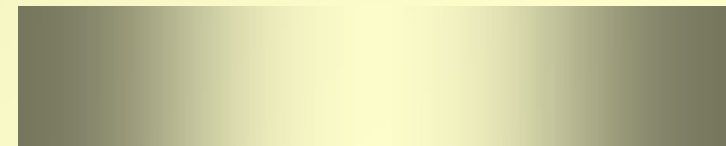
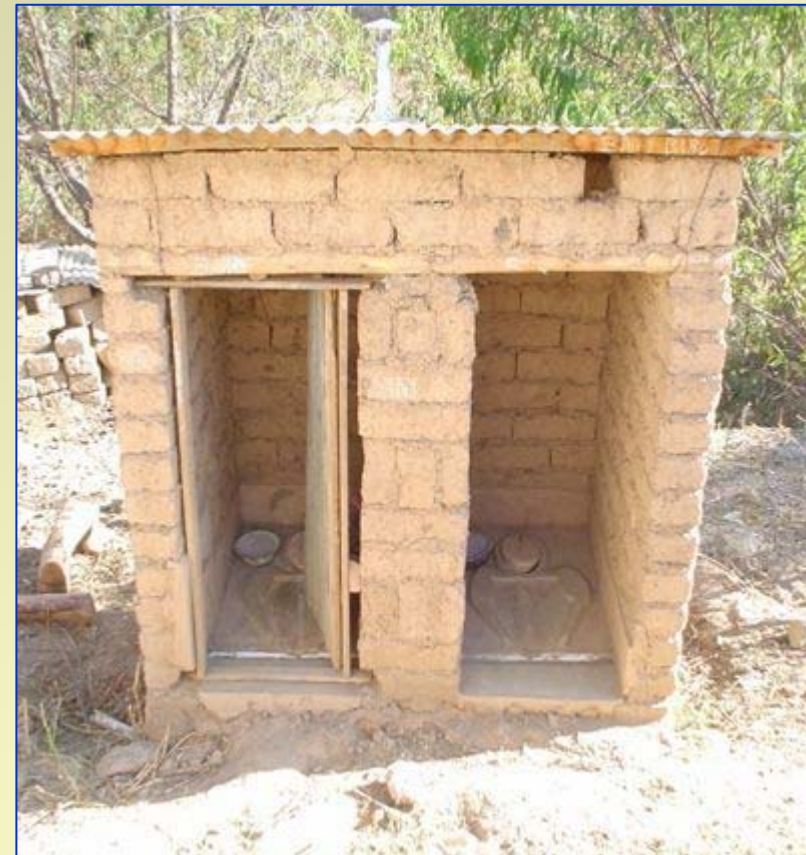
- ◆ 21% of families use their latrine frequently and operate it correctly
- ◆ 49% use their latrines occasionally and/or incorrectly
- ◆ 30% do not make use of their latrines
- Time required to fill one vault: 1.5 years for frequent users



Summary of Findings

—————> Frequency and Quality of use

- ◆ The model: Robust and well adapted to local conditions.
- ◆ The users: Poor performance in O&M aspects. Main problems are:
 - ◆ Control of humidity in vault
 - ◆ Scattered faeces on the slab
 - ◆ Parallel use of both vaults

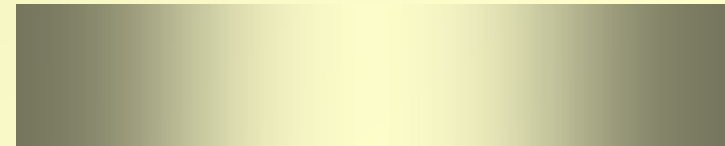


→ The Andean culture: Disease & Use of excreta

- ◆ Disease = loss of equilibrium:
 - ◆ Symptoms and curative measures have a physical and spiritual dimension
 - ◆ However, some control measures are applied.
 - Reducing risks by dispersion (i.e. open defecation)
 - Sensorial system (smell as unit of measure and cause of contamination)
- ◆ Use of excreta:
 - ◆ Widely used for therapeutic purposes
 - ◆ No traditional use in agriculture.

→ Program approach/hygiene promotion

- ◆ Messages selected for marketing sanitation and hygiene promotion:
 - ◆ “Open-air defecation might lead you to death”
 - ◆ “Use latrine for defecation, if you don’t want to get sick.”
 - ◆ “Treated faeces are good for agriculture and bring economical benefits”
- ◆ Hygiene promoters were not comprehensively trained and lacked of detailed knowledge regarding the faeces treatment process

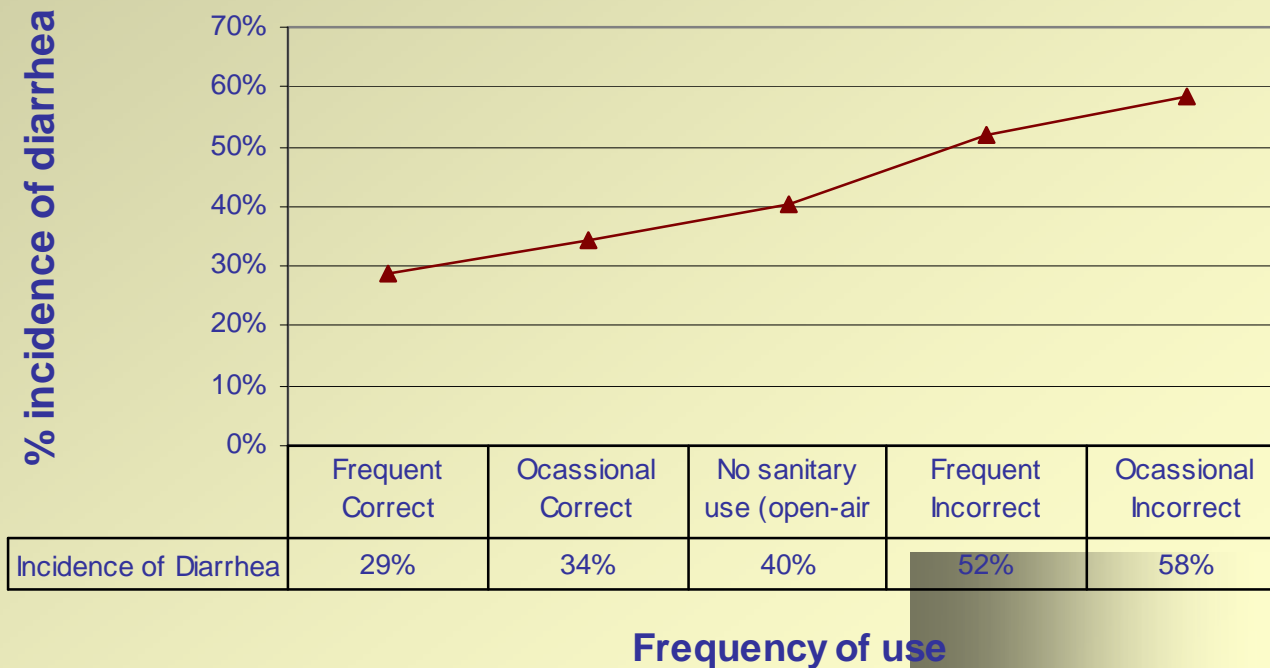


Factors affecting the use of latrines

→ Program approach/hygiene promotion

- ◆ Results of latrine use were not tangible in terms of health improvement for those who are operating their latrine incorrectly:

Perceived incidence of diarrhea vs. frequency of use



Factors affecting the use of latrines

→ Agronomical/economical factors

- ◆ **Agronomical: Limited value perceived in the reuse of excreta in agriculture in contradiction with program's message:**
 - ◆ **Treated faeces: Poor in terms of quality**

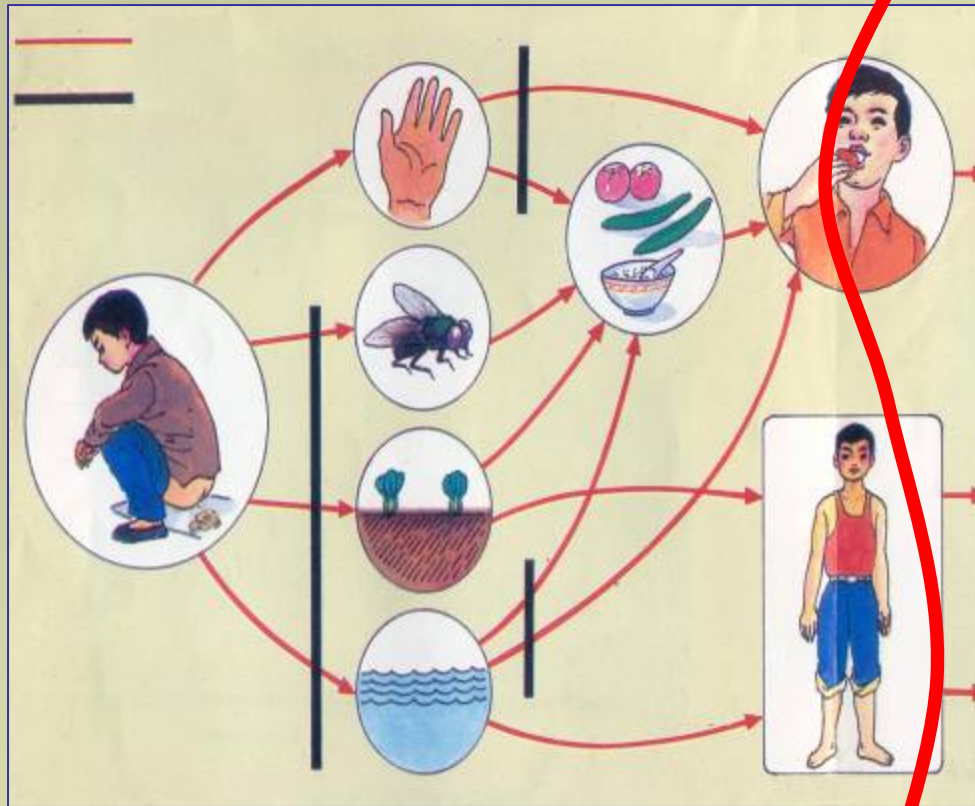
Short in terms of quantity (1 m³ every 3 years)
 - ◆ **Urine: Very good in terms of quality, but faces logistic problems in storage, and transportation.**
- ◆ **Economical: Limited economical benefits of reuse (Max of USD45 6% annual family income).**

→ Technical/Institutional factors

- ◆ **Technical: Existence of marginal motivating technical factors**
 - ◆ Existence of door (in cold regions)
 - ◆ Slab design
 - ◆ Distance between latrine and household $6 > OK < 10$
- ◆ **Institutional:**
 - ◆ Apparent “divorce” between Health and Sanitation sectors
 - ◆ Poor coordination with and training to teachers
 - ◆ Existence of strong internal organizations is helpful

Factors affecting the use of latrines

→ **Conclusions: An ambiguous message**



➤ **Household food security is prioritized**

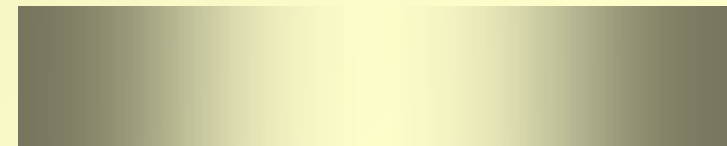


→ Conclusions:

- ◆ Culture seen as a barrier to sanitation (specially by local hygiene promoters “assimilated” by the project).
- ◆ Weak or inappropriate hygiene promotion messages discourage latrine use.
- ◆ Correct/incorrect O&M influence process of learning and appropriation. No tangible benefits (esthetical, functional, economical, health) are experienced in poorly operated latrines.



- ◆ **Educational component should be streamlined:**
 - ◆ Giving more emphasis to the treatment process to ensure proper operation.
 - ◆ Stressing that reuse of treated faeces is optional (recommend only if secondary treatment is applied)
 - ◆ Supporting post-construction follow-up and involvement of Health and Education sectors.
 - ◆ Changing the mindset of message carriers (local hygiene promoters, implementing NGOs)



The team

Research team

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