



Comparison of Pupils' Acceptance of Conventional and Ecological Sanitation in Rural Schools

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Overview countries



Conventional rural school sanitation

Common sanitation technology: Pit latrines Separate toilets for boys and girls







Ecological rural school sanitation

Ecological sanitation technology: Urine Diverting Dry Toilets (Ecosan)

Separate toilets for boys and girls







First indoor ecosan indoor toilet in Armenia



Squatting toilet with urine diversion



Waterless urinals at different heights



Urine storage tanks in the basement



Wash basins and the toilet sanit care-taker



Built by AWHHW,

Quelque Chose
architects and TUHH

Research questions

How do secondary school pupils in the EECCA region accept rural school toilets, what are the perceived differences between ecological and conventional sanitation systems?

Are there relevant differences between the three sub-regions, Eastern Europe, the Caucasus and Central Asia, and between boys and girls?

Is there a relation between the two types of sanitation system and fluid intake at school?

What is impact of school sanitation on absenteeism of girls in puberty?



Study Methodology

No of pupils and availability of toilets/urinals in the selected rural ecosan and reference schools

	Ecosan schoo	l (10 schools)	Reference school (8 schools)		
	No of	pupils	No of pupils		
Average Min- Max		62 · 490	325 196 - 449		
	No of boys per toilet/urinal	No of girls per toilet	No of boys per toilet	No of girls per toilet	
Average Min- Max	27 8 – 43	43 4 – 100	36 23 – 110	37 25 – 115	



Study Methodology

overview of the study population and methods

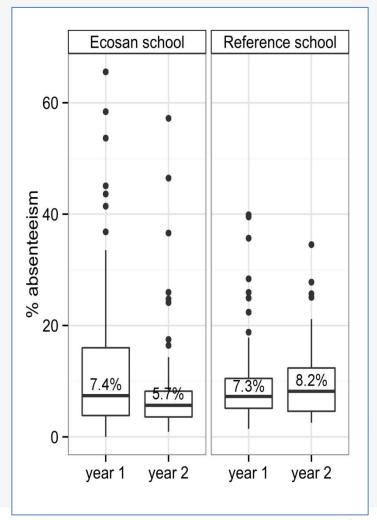
Method	No. of schools		No. of pupils per	Total no.	Statistical
Method	есо	refere	school	of pupils	Assessment
	san	nce			
Official absenteeism records	5	5	72-108 (50% girls)	931	two-tailed Mann-Whitney U tests
Questionnaire	10	8	at least 15 of each girls and boys	636	Chi-squared test
Focus group discussion	10	8	at least 6-10 of each boys and girls	145	Qualitative Data



Monthly absenteeism rate distributions by year and type of school

Boys miss schools in general more often than girls

Small but significant decrease in absenteeism in case of ecosan



Questionnaire

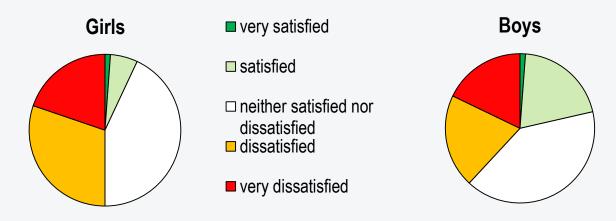
- 4 questions related to satisfaction
- 6 questions related to toilet use
- 2 questions related to drinking at school
- 2 questions related to skipping school
- 2 questions related to MHM



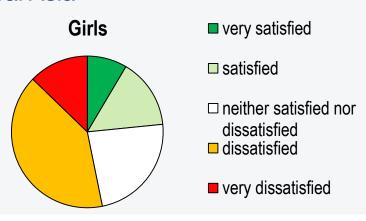
Schools with pit latrines

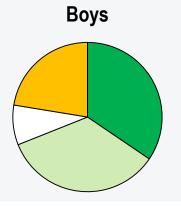
"Are you satisfied with the school toilet?"

In Eastern Europe and the Caucasus



In Central Asia



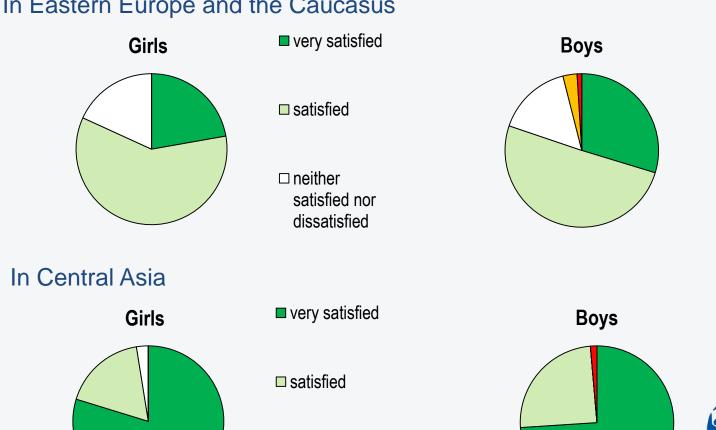




Schools with ecosan toilets

"Are you satisfied with the school toilet?"

In Eastern Europe and the Caucasus

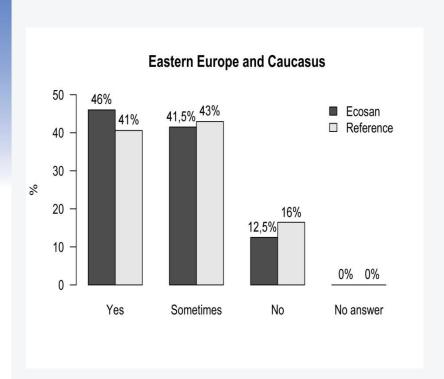


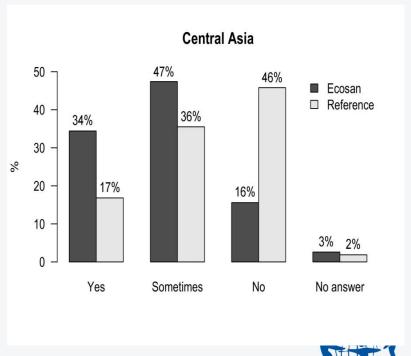
□ neither

satisfied nor dissatisfied

Questionnaire – about drinking at school

"Do you drink at school?"





No difference between boys and girls



Questionnaire – about MHM

"Do you skip school during menstruation?"

70% of the girls at ecosan schools reply that they never skip school during menstruation, compared to 50% of the girls at reference schools.

No differences between EEC and CA.

"For what reason do you skip school during menstruation?"

The major reason for skipping school is "pain".

Followed by "lack of privacy",

"lack of a washing facility",

"problems in obtaining hygienic material" and

"inconvenience of toilet"

How do secondary school pupils in the EECCA region accept rural school toilets, what are the perceived differences between ecological and conventional sanitation systems?

Good acceptance of school toilets can be translated into sanitation conditions providing comfort, odor, cleanliness and privacy

Pupils do not care of the technology but like that it can be placed inside, attached or close to the building.

If the operation and maintenance are not functioning, it is a problem

On pit latrines:

Very unhygienic conditions and behavior in some places
Especially girls avoid using the pit latrines
In all countries some girls use latrines during classes to have privacy

Is there a relation between the two types of sanitation system and fluid intake at school?

Not always a direct relation between drinking at school and the sanitation situation as other factors are overlapping.

However in CA, the results suggest evidence that non-accepted school toilets lead to less fluid intake.



What is impact of school sanitation on absenteeism of girls in puberty?

In general the boys miss school more often than girls certainly due to other reasons than school sanitation.

Girls in all countries say that they miss school much less during menstruation when ecosan was implemented.

The higher positive impact of the intervention for girls is further underlined by the results of the FGD.



Thank you



Tajikistan

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