

Towards a Healthy School Environment - Sanitation in Rural Schools

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Conventional rural school sanitation

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

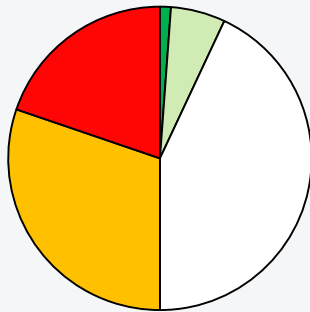


Schools with pit latrines

„Are you satisfied with the school toilet?“

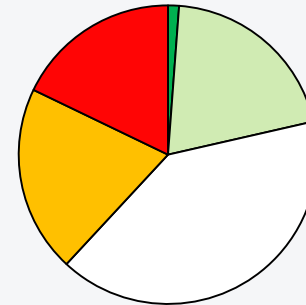
In Eastern Europe and the Caucasus

Girls



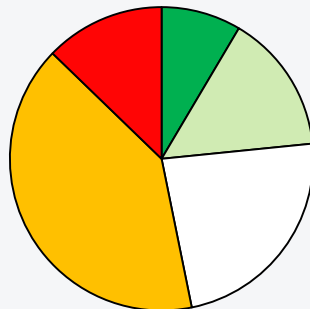
- very satisfied
- satisfied
- neither satisfied nor dissatisfied
- dissatisfied
- very dissatisfied

Boys



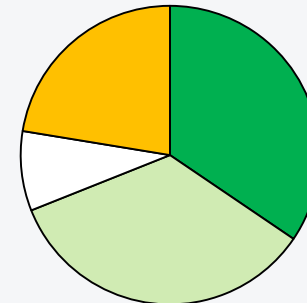
In Central Asia

Girls



- very satisfied
- satisfied
- neither satisfied nor dissatisfied
- dissatisfied
- very dissatisfied

Boys



Questionnaire – about MHM

“ Do you skip school during menstruation?”

50% of the girls reply that they skip school during menstruation
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”

“inconvenience of toilet”



Ecological rural school sanitation

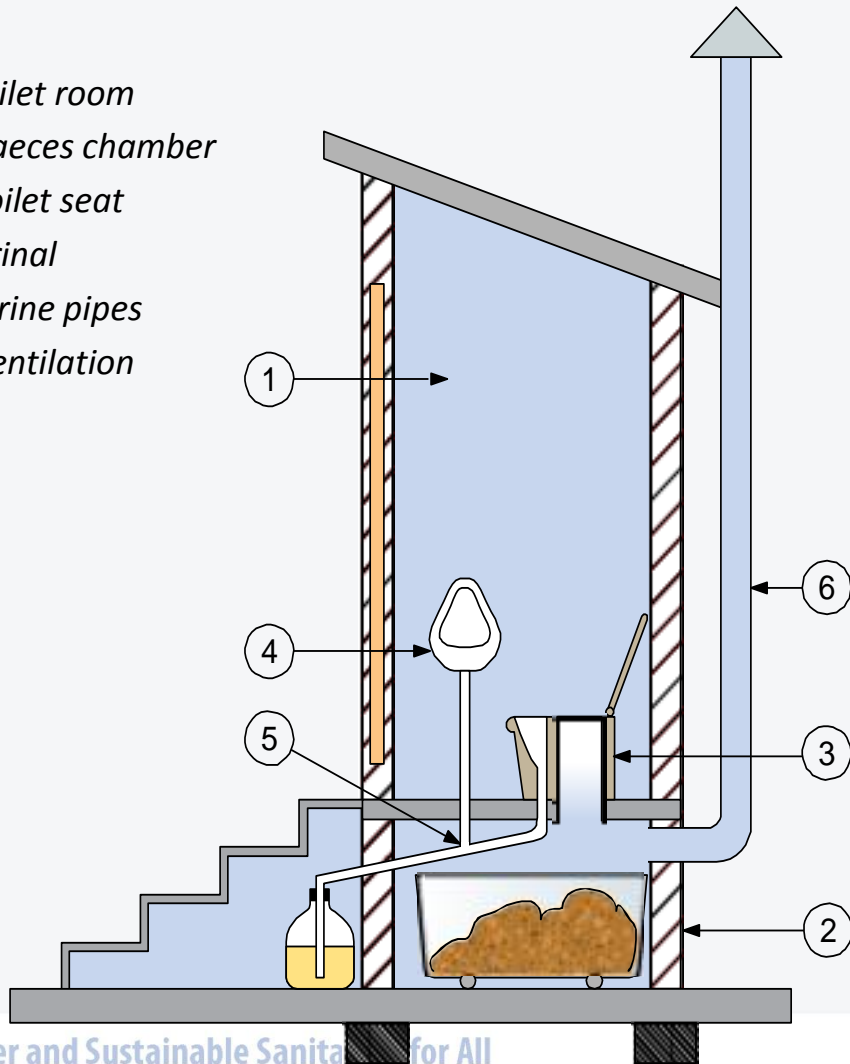
Ecological sanitation technology: Urine Diverting Dry Toilets
(Ecosan)

Separate toilets for boys and girls



Ecosan / UDDT Scheme

- 1) Toilet room
- 2) Faeces chamber
- 3) toilet seat
- 4) Urinal
- 5) Urine pipes
- 6) ventilation



Advantages:

- No water for flushing needed
- Can be built indoor
- Hygienic and smellfree if properly operated
- No groundwater pollution
- Nutrients are kept and re-used



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 care-taker



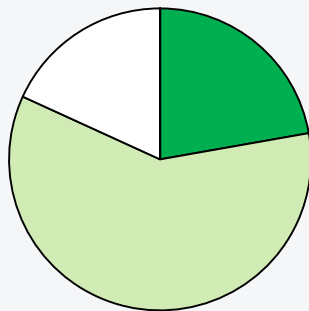
Built by AWHHW and TUHH www.wecf.eu

Schools with ecosan toilets

„Are you satisfied with the school toilet?“

In Eastern Europe and the Caucasus

Girls

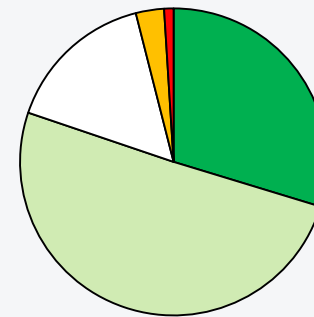


■ very satisfied

■ satisfied

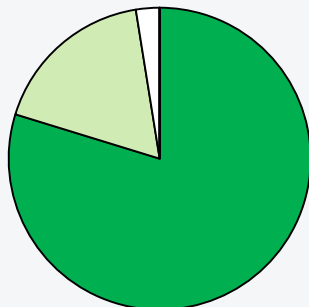
□ neither
satisfied nor
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Boys



In Central Asia

Girls

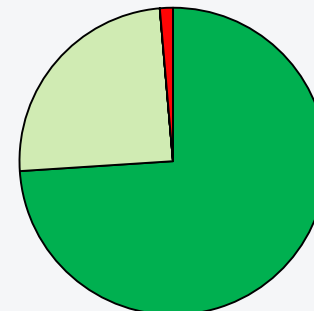


■ very satisfied

■ satisfied

□ neither
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Boys



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 more privacy



Moldova: National code for construction and operation of ecosan toilets



More than 55 school toilets with UDDT in operation



Conclusions for Moldova

- Ecosan toilets have been changing radically approaches on rural sanitation in Moldova in the past 10 years. In many rural areas sewerage is simply not feasible due to lack of reliable water supply or because investment and operation costs are not affordable.
- Construction and maintenance norms are necessary to ensure sustainability.
- Example of Moldova demonstrates that it is possible to change views, life skills and improve hygiene and health.

According to Ion Salaru, Center of Public Health, Moldova





Moldova

Thank you



Tajikistan

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Anna Tsvetkova, Mama86, Ukraine; Surayo Saidova, ASDPNau, Tajikistan.



Overview countries



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 school (10 schools)		Reference school (8 schools)	
	No of pupils		No of pupils	
Average	262		325	
Min- Max	36 – 490		196 - 449	
	No of boys per toilet/urinal	No of girls per toilet	No of boys per toilet	No of girls per toilet
Average	27	43	36	37
Min- Max	8 – 43	4 – 100	23 – 110	25 – 115



Study Methodology

overview of the study population and methods

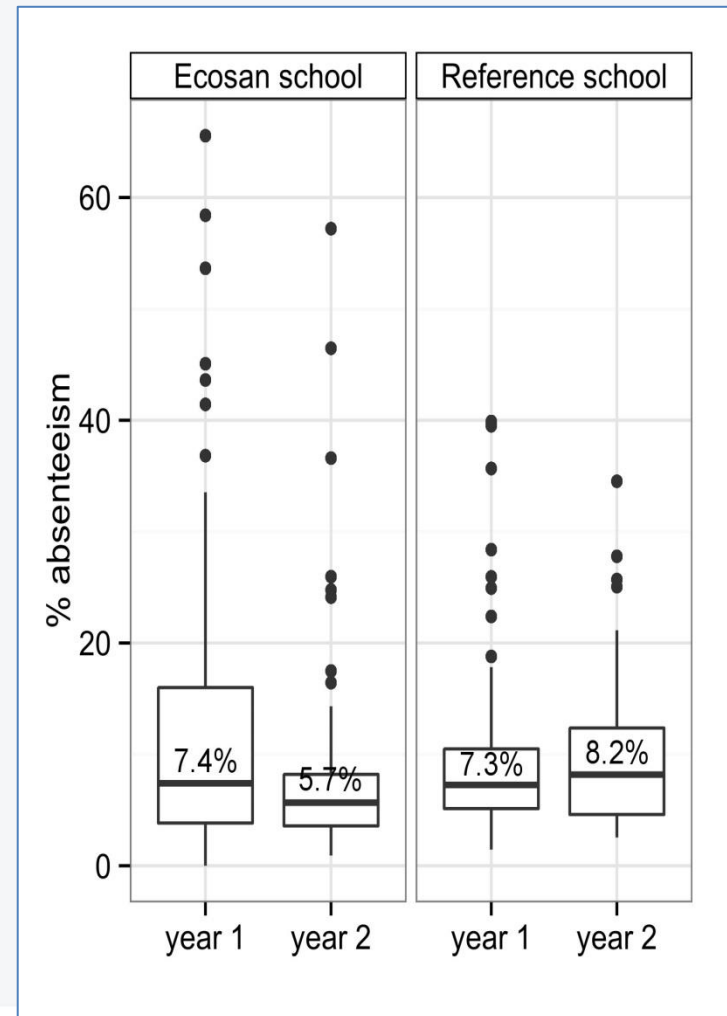
Method	No. of schools		No. of pupils per school	Total no. of pupils	Statistical Assessment
	eco san	reference			
Official absenteeism records	5	5	72-108 (50% girls)	931	two-tailed Mann-Whitney U tests
Questionnaire	10	8	at least 15 of each girls and boys	636	Chi-squared test
Focus group discussion	10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

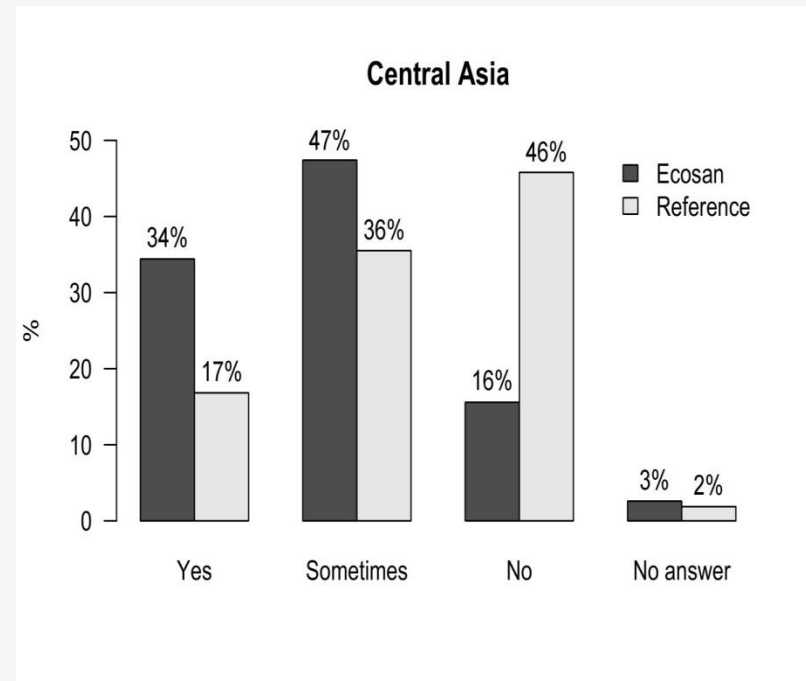
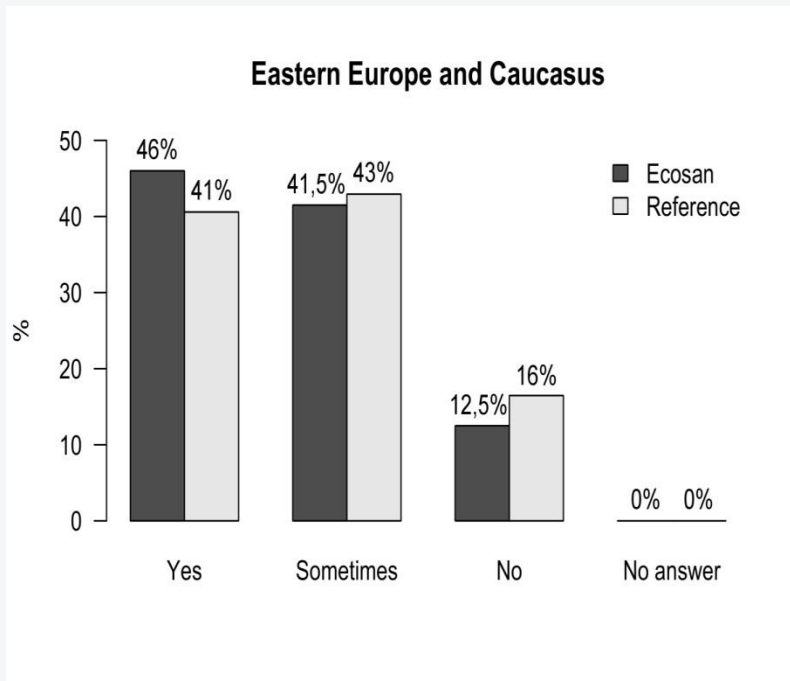
2 questions related to skipping school

2 questions related to MHM



Questionnaire – about drinking at school

„Do you drink at school?“



No difference between boys and girls



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.

