CASE 9 MOLDOVA

APASAN – SWISS WATER AND SANITATION PROGRAM
SKAT CONSULTING LTD.

Left: Children using hand washing facilities in the Kindergarten of Carpineni village, Moldova, which has been connected to a new water supply system.
Right: Teachers and senior pupils prepare for training of trainers for use and maintenance of ecosan school toilets in Soldanesti district, Moldova.
Below right: New ecosan school toilet attached to the main school building of Oliscani village, Moldova.

MOLDOVA'S RURAL SCHOOLS NOW HAVE AN ALTERNATIVE: CLEAN AND COMFORTABLE URINE DIVERTING DRY TOILETS.

People in many Moldovan villages live with poor sanitation and water supply infrastructure. The majority of households still rely on simple pit toilets in the yards, and the situation in most schools is not better: Usually there are pit toilets, built away from the main school building. More often than not, the toilet buildings are in bad conditions, without cabins or separators for privacy, without electricity or heating in winter, with no hand washing facilities and only poorly maintained and rarely cleaned. These toilets are unhygienic and unpleasant to use and they pollute the groundwater. School authorities lack of good alternatives, as flush toilets are rarely feasible, because there are no sewer systems and wastewater treatment plants in villages.

Since 2007, the Swiss Cooperation has helped promoting an alternative option: Urine diverting dry toilets (UDDT), or 'ecosan toilets' as they are generally called in Moldova.WECF and the Moldovan NGOs WISDOM, SEAM and ECO-TOX were instrumental in initiating the construction of the first ecosan toilet blocks in Moldova, the promotion of this previously unknown solution with the local authorities, and the training of users.

Acceptance was excellent right from the beginning and demand for more such toilets appeared from everywhere, which convinced the Swiss Cooperation to integrate ecosan into their on-going support to improve school sanitation in Moldova. Nowadays, ecosan school toilets are built in cooperation with school authorities of the districts, by local design and construction companies and with financial and technical support from the Swiss project. The ecosan toilets are adjacent to the main schools building, so students and teachers can use them without having to go outside in the cold. According to modern standards, toilets are built with tiles, heating, lightning, ventilation and hand washing facilities. In the toilet blocks there are separate areas for girls and boys, each with several closed cabins for privacy.

"We are not late for the classes now, and it is more comfortable in wintertime, here we have toilet paper and we can wash and dry our hands." says a student from Rădeni village in Strășeni district.

In each school a facilitator team of teachers and students introduce the proper usage of the ecosan toilets to all teachers and students of the school. The team also organizes campaigns on handwashing and hygiene. While the caretakers of the schools are responsible for cleaning and maintaining the toilets, the school administration staff takes care of budget for soap, paper and cleaning materials. The staff further organizes the removal of urine from tanks

SUSTAINABILITY CRITERIA

1 HEALTH AND HYGIENE:
The Moldovan ecosan school toilets control pathogens well and are generally much better maintained as the old pit toilets.

2 ENVIRONMENT AND NATURAL RESOURCES:
Ecosan toilets protect the environment better than pits (in rural Moldova there is no management of fecal sludge) or flush toilets (no wastewater treatment). They allow reusing human waste in agriculture.

3 TECHNOLOGY AND OPERATION:
Ecosan toilets have proven to work well in rural schools in Moldova. They can be operated and maintained by school staff.

4 FINANCIAL AND ECONOMIC ISSUES:
Construction costs of ecosan school toilets are so low that school authorities can realistically cover them. O&M can be financed with available school budget.

5 SOCIO-CULTURAL AND INSTITUTIONAL ASPECTS:
Ecosan toilets are well accepted by students, teachers, parents and also various national agencies. Regulatory framework is being adapted to include ecosan as standard for rural areas.

and of compost from collection chambers, the use of the urine for fertilizing fields and the use of compost in gardens or its disposal by burial. The facilitator team, the caretakers and the administration staff all receive initial and refreshment trainings in their field of activity from the Swiss project. Maria Bajurea, the school Principal of a school in Copăceni village, Sîngerei district says: "The new toilets changed not only the image and status of the schools, it changed also our attitude."

The demand for ecosan toilets is constantly increasing. By 2015, Swiss Cooperation has supported the construction of ecosan toilets in more than 56 schools, serving about 19,000 students and teachers. Throughout the years, a lot of effort was invested in monitoring and improving the toilets and the implementation approach:

› The design has been optimized for reducing construction costs to about 35,000 € for an average school.
› Toilet blocks are now attached to the main building rather than built as separate buildings, which enormously improved comfort, acceptance and maintenance.
› Barriers to access have been reduced, now the toilets can be accessed with wheelchairs.
› Responsibility of school administrations, parents and students has continuously been increased, e.g. direct training of students and teaches has shifted to training of trainers.

› The project has continuously worked towards up-scaling: The latest projects are done with the district school administration rather than with individual schools, which allows for higher number of toilets to be implemented in parallel.
› Local financial contributions have increased over time and now approach 30 %.
› National authorities now know and accept ecosan toilets as valid solution and start including it in strategies and norms. In the coming years, the project will complete the handover of know-how and the lead for implementation of ecosan toilets to Moldovan school authorities.

The long-standing support of the Swiss Cooperation to the development of the ecosan toilet solution was key to the success, as it allowed for continuous improvements until the solution reached maturity. The majority of school toilets of the first generation continue to work well. In Moldova, ecosan school toilets are now widely known to function well and to be clean and comfortable.

The Swiss Water and Sanitation Project (ApaSan) is implemented by the consulting company Skat Consulting Ltd., financed by the Swiss Agency for Development and Cooperation (SDC) and co-financed by the Austrian Development Cooperation (ADC). The project has helped introducing and promoting ecosan toilets as an alternative option to unhygienic, uncomfortable and ground-water polluting pit latrines in rural schools in Moldova. In 8 years of support, more than 19,000 students and teachers in 56 schools have been served with better toilets, and the solution has been developed to maturity for up-scaling by Moldovan authorities.

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PROJECT DETAILS
Type of project: Swiss Water and Sanitation Project (ApaSan)
Project period: 2007–2015
Start of operation: 2007
Project scale: More than 56 schools in Moldovan villages (until 2015)

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