

# The sanitation shortfall of Europe's small communities

● An estimated 20 million people, possibly considerably more, across the European Union are without safe sanitation. **BILL McCANN** reviews the situation affecting small communities in particular.

**A**n European Union (EU) in which 20 million or more people remain without safe sanitation in these early months of 2009 must sound an unlikely proposition, but there is evidence of it being an alarming reality.

It is a situation brought about by the EU's two most recent rounds of expansion, the last in January 2007, to take in states of central and eastern Europe.

Stretching from the Baltic states in the north to Bulgaria in the south, these countries commonly suffer from the lack of investment in water supply and sanitation infrastructure that characterised several decades of Communist rule.

They also have in common much larger rural populations than is typical of the western European countries. In a report published as a contribution to the 2008 International Year of Sanitation\*, the Global Water Partnership (GWP) for Eastern and Central Europe records this as varying between 25% of the national population in the Czech Republic and over 50% in Slovenia.

The report goes on to speak of the proportion of these rural populations that are in communities of less than 2000 inhabitants. This is an important distinction because the EU legislation primarily directed at improving wastewater treatment, the Urban Wastewater Treatment Directive (UWWTD) 271/91/EEC, specifies only the requirements for populations above that figure.

According to figures quoted in the GWP report, the ten central and eastern European states lately absorbed into the EU have a population of 102 million, including over 27 million in communities of less than 2000. Assessments made for the purposes of the report indicate that around five million of these rural residents are connected to sewerage systems leading to wastewater treatment plants and that, with the notable exceptions of Bulgaria and Romania, these countries generally have between 50% and 75%

of their populations connected to public sewerage systems and treatment plants.

Driven by the UWWTD and with the support of various EU funding mechanisms, there will be a continuing increase in connections to public systems for urban populations. The concern is for the 'forgotten 20 million' in the small rural communities where the legislative driver does not apply.

It is a concern that was forcefully brought to the attention of a packed audience of water sector professionals during last August's Stockholm Water



The new toilet facility for a Bulgarian village cultural centre delivered through a WECF-supported project. Credit: WECF

Week. They were attending a seminar organized by Women in Europe for a Common Future (WECF), a Non-Governmental Organisation (NGO) active in supporting provision of safe and sustainable sanitation projects in these unserved rural communities.

GWP records that around 75% of rural populations generally in these countries are depending on cesspools, typically in very poor condition. The EU legislative focus on the larger communities encourages national governments to direct resources in that direction. The 20 million or more in small gatherings are therefore likely to remain dependent on the cesspool option for the foreseeable future.

Just what that means for the people concerned was outlined for the Stockholm audience by WECF executive director Sascha Gabizon. Speaking of conditions in some of the WECF project villages in Romania and Bulgaria, she described situations that can only be seen as scandalous in a modern Europe. She spoke of school-children in Garla Mare village in

Romania who defecate in the open behind the school latrine because, inside the latrine, puddles of urine on the floor make it impossible to reach the pit.

Speaking of the situation in the summer of 2008, Ms Gabizon said: 'When I visited villages in our project regions in Romania and Bulgaria these last months, I still hear from the Romanian doctors that babies fall ill with blue baby disease from too high nitrates in the drinking water. When we test nitrates, far too often we find such excessive levels in drinking water, ten times more than the maximum allowed. These nitrates are not caused by excessive fertilizer usage, but by infiltration of faeces into drinking water wells, both animal dung as well as human faeces from unsealed latrines, latrines which are often close to wells.'

'Bulgaria has regular outbreaks of hepatitis A, up to 300 cases a week in the summer peak, which are probably caused by exposure to raw sewage. Often poor rural populations are the victims. In many of the rural areas in Bulgaria, households do have a drinking water connection and have installed a flush toilet. But the toilets flush into septic pits which often leak, overflowing in the garden, or in the neighbour's garden, or onto the street.'

## Underestimating the numbers unserved?

Referring to the GWP report Ms Gabizon felt the 20 million figure was a minimum estimation based on unrealistic expectations of compliance with the UWWTD. She felt many millions more were currently without safe sanitation, an opinion reinforced by several other contributors to the seminar.

One of those, Arno Rosemarin of the Stockholm Environment Institute, thought the figure could be two or three times greater. Speaking more recently to *Water21* he suggested that would be due to the unquantified lack of sewage treatment in the urban areas of the countries in question. He says it is not possible to be more precise because robust data from these countries or from the EU is simply not available.

That is not an isolated opinion and, to some extent, it is borne out by

evidence from other sources. The WECF report of the Stockholm seminar for example includes two graphics illustrating the extent to which surface waters and groundwaters in the EU countries are currently at risk of failing the 'good quality' status required by the EU's Water Framework Directive (WFD). Significantly the graphics are qualified with the remark that they are 'based on data provided by the Member States'.

Both Bulgaria and Romania estimate that just 15% or so of their groundwaters are in the 'at risk' category. By way of comparison France, Germany and the UK, three long-standing EU member countries, each with highly developed and sophisticated quality surveillance, monitoring and recording systems, estimate that nearly 40%, over 50% and 60% respectively of their groundwaters are at risk of not making the 'good quality' objective.

The latest assessment of WHO's Joint Monitoring Programme (JMP) (2008, using 2006 data) – also relying on data presented by the national authorities – similarly differs from the picture painted by WECF and GWP and based on their direct knowledge of the situation 'on the ground'.

In Romania, for example, the JMP records that there is no open defecation and that 55% of the rural population has the benefit of 'improved sanitation'. At the same time it shows that 90.3% of the rural population has no sewer connection but adds that 50% of this group is 'considered as having improved sanitation'. If this 45% or so is added to the 9.7% of rural dwellers shown variously as having inside or outside toilets flushing to septic tanks or other collection devices, it is possible to arrive at the 55% figure for 'improved sanitation', but this contorted story surely gives no impression of reliability.

The JMP figures for Slovakia and Bulgaria are similarly optimistic; 100% of Slovakia's urban population and 99% of rural dwellers evidently benefit from 'improved sanitation'. Bulgaria is not far behind, declaring 100% improved sanitation in urban areas and 96% for

**The reality of inadequate sanitation provision. Credit: WECF**

rural dwellers – the latter a figure that has remained constant since 1990!

Whether or not 96% of Slovakia's rural citizens have improved sanitation in JMP terms, Stanislav Doktor, the assistant director of that country's Association of Towns and Municipalities told the Stockholm seminar that just 57% of the 5.4 million population has access to a central sanitation system. The rest, in the 86% of Slovakia's 2929 communities that harbour less than 2000 people, depend on 'sink holes and catch drains not in good technical condition'. He feared that the EU's current sanitation priorities, if continued, would ensure that these people remained without safe sanitation until well after 2015.

In telling the seminar that his national government and relevant ministry appear unwilling to acknowledge the plight of the small communities, he was probably outlining a scenario that applies in other central and eastern European states, such as those mentioned above, where the national data belies the true situation.

#### Self-help for small communities

In Slovakia, Doktor believed that his association must negotiate with the national government and that it could do so from a position of strength since the association represents 95% of the municipalities. In the meantime, the association was seeking its own solutions by working with external partners such as GWP to inform the mayors of the small village communities of sustainable sanitation solutions. Pilot demonstration projects were being planned in a number of small municipalities as one route to convincing the government of the need for action.

The panel discussion that closed the Stockholm seminar revealed this self-help, through local agencies supported by external experts and NGOs, to be a favoured approach that was already being applied in a number of countries.

Several speakers, including Professor Duncan Mara, of Leeds University, and Professor Ralf Otterpohl, director of the Institute of Wastewater Management at Hamburg University of Technology, spoke of sustainable solutions achievable through low cost approaches such as simplified sewerage, solids-free sewerage and ecosan-type construction.

In both Romania and Bulgaria WECF has been supporting projects to provide dry urine-diverting toilets and earth filters since 2007. The projects will continue through to 2010. A separate WECF project in Bulgaria, from 2005 to 2007, assisted the development of a model for sustainable



water and waste management in rural areas.

Ralf Otterpohl says his institute is working on many ecosan projects in Romania, Bulgaria and Ukraine and is often involved in WECF initiatives. Speaking recently to *Water21*, he remarked on the terrible poverty associated with these rural communities, a matter that was exposed in some detail during the Stockholm meeting.

Fortunately that seminar was attended by Helmut Bloech of the European Commission's Environment Directorate. He must have had an uncomfortable day, but he will have been left in no doubt as to the extent and seriousness of this problem.

He was impressed by what he heard about on-site sanitation solutions and said that a planned updating of the current publication on small wastewater treatment plants should focus on that type of approach. There would be no more EU money in the foreseeable future so there must be decisions on making the best use of what was available. To that end the Commission would be supporting stakeholder dialogues during 2009.

These are some small positive signs and the news at the end of January was of continuing progress. Sascha Gabizon told *Water21* that WECF, a prominent initiator of action, has organised a high level meeting in Romania on Danube Day, 29 June, to present the results of work on a master plan for water supply and sanitation options in clusters of small rural communities.

A further important event, a meeting of the European Union Water Initiative, has been planned by the European Commission and the Government of Romania, for Bucharest in October. ●

\* Sustainable sanitation in Central and Eastern Europe - addressing the needs of small and medium-size settlements. See: [www.swedenenviro.se/wrs/document/GWPSustainableSanitationinCEE.pdf](http://www.swedenenviro.se/wrs/document/GWPSustainableSanitationinCEE.pdf)

**Modern composting toilet in a public facility in Smeyovo, Stara Zagora, Bulgaria. Credit: WECF and NGO Earth Forever**

