Insights

Cleaning Up after War

Bombs and bullets can kill years after the battles have ended, by leaving behind toxins and contaminants. It's up to Pekka Haavisto to figure out how to handle the mess By MARC AIRHART

> During its springtime assault against Saddam Hussein, the Pentagon played videos showing the deadly precision of U.S. weaponry. Guided by satellites and lasers, missiles found their targets without hitting nearby buildings. Yet even if civilians were spared, they could face dangers from spent munitions. For many weapons, U.S. forces have for the past two decades relied on depleted uranium, which, being nearly twice as dense

as lead, can penetrate materials more effectively than conventional alloys can.

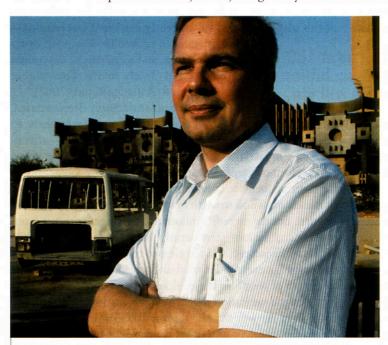
The metal, a by-product of uranium enrichment for nuclear power plants and warheads, is toxic when ingested and slightly radioactive, and that worries Pekka Haavisto. "Do you think that people in the postconflict situation are somehow harder people and they can take more burden?" Haavisto asks. "Or do you think that they are human beings like us, and whatever you can avoid, you should avoid?"

It's clear what his answer would be. The 45-year-old Finn chairs the Geneva-based Post-Conflict Assessment Unit (PCAU), a division within the United Nations Environment Program. His team goes to places where conflicts have just ceased, looks for environmental trouble spots and sets priorities for cleanup and reconstruction.

The PCAU began in 1999 following the war in the Balkans (it was known then as the Balkan Task Force). Some of the NATO bombings resulted in the release of toxic chemicals. The executive director of the U.N. Environment Program, Klaus Toepfer, needed someone to determine the severity of the war pollution. He remembered that, while serving as a German environmental official, he had met a young environment minister from Finland who was enthusiastic and well respected. "So I came to the conclusion that this would be a great chance to bring Pekka Haavisto on board," Toepfer recalls.

Haavisto had recently finished his term in office and was considering returning to environmental journalism when Toepfer called. "And of course that was an opportunity to which you could not say no," Haavisto says. "And I arrived to an empty room with nobody to help me that first day."

Haavisto, who cofounded the Green Party in Finland, pulled together 60 experts from around the world. Through that summer and fall, the team searched for toxic or radioactive pollution in river sediments, groundwater, soil and air. In the end, they concluded that the war had not resulted in an environmental catastrophe.



PEKKA HAAVISTO: POSTCONFLICT FIXING

- Toured Europe at age 15 via a 25-nation train pass. "Traveling taught me to understand a country's culture and history. When offering solutions to the environmental problems, different traditions have to be understood."
- On his job: "One third is lobbying, one third is fund-raising, and one third is the real environmental work."
- Depleted uranium used in battles against Iraq since 1991: 400 to 450 metric tons. (Estimate by Dan Fahey, an independent policy analyst in Berkeley, Calif.)

But they found four "hot spots"—industrial sites where pollution posed a threat to human health. Since then, most of the necessary cleanup has been completed. "After Kosovo came the Serbia work and then the Bosnia work," Haavisto says. "Then we were asked to do similar work in the occupied Palestinian territories and Afghanistan and now just lately in Iraq. I don't know when I'm returning home to Helsinki."

At first, U.N. member nations were skeptical about the need for assessing a postconflict environment. "People were always saying, 'Well, why are you coming with the environmental portfolio? We have a humanitarian crisis, we have the refugees, and we have social issues and the schools,' and so on," recalls Haav-

isto, who talks virtually nonstop at times. But if you don't take care of the environment immediately, before reconstruction, Haavisto points out, it will be much costlier later. Plus, contaminants may prolong the suffering of people. "And I'm quite convinced that this is the approach that the international community should have in each and every region and after each and every conflict," he insists.

Larger, more chronic issues persist in places such as Afghanistan, where more than 20 years of fighting has taken its toll. Land mines continue to kill people and animals. Clean drinking water is in short supply because of drought, contamination from poorly located dump sites, past bombings and even simple neglect. Biodiversity loss and deforestation add to the environmental woes.

Haavisto's latest project is an assessment of Iraq. In a perfectly safe region, Haavisto and his PCAU team would need three months

to complete the fieldwork and another two months to analyze the samples. Haavisto had hoped to be in Iraq by June, but frequent attacks on U.S. troops have delayed his efforts until August. He says that assessing Iraq will cost about \$850,000, much of it from the Humanitarian Flash Appeal, a relief fund to which U.N. countries are asked to contribute.

Of major concern is the depleted uranium of some ammunition. When such a projectile makes impact, a bit of the uranium gets pulverized, turning into airborne radioactive dust that could be dangerous to breathe. Fragments of depleted-uranium weapons sitting on the ground can corrode and leach into the soil and groundwater. But the public health dangers of depleted uranium in the environment are not fully known. Some argue that it causes birth defects, cancers and Gulf War Syndrome. Military experts counter that no conclusive evidence links it to disease. But that may have more to do with the relatively recent use of the material and the lack of actual studies.

In any case, the PCAU team has begun mapping the areas

exposed to the metal. Haavisto explains that the British government was providing information on where depleted-uranium ammunition had been used in southern Iraq. But the U.S. military was so far not helping in this regard. Distinguishing which depleted-uranium contamination resulted from this year's bombings and which from the 1991 Gulf War may also be hard.

Uranium is just one of several hazards in postwar Iraq. Haavisto's team will undoubtedly find that some industrial and military targets released toxic chemicals into the air, soil and water. The black smoke from burning oil trenches around Baghdad, meant to shroud targets, contained many toxic substances

that might affect the soil and drinking water.

In addition, Haavisto expects to find a disaster in the Mesopotamian marshes: the nourishing water that once made this area the Fertile Crescent has been dammed up and siphoned off by the ousted regime. "It has not only influenced or affected the biodiversity but also the livelihoods and the situation of the marsh Arabs," he says.

Ironically, one of the biggest environmental problems in Iraq may stem not from direct military conflict but from a decade of U.N.imposed sanctions. Haavisto explains that as replacement parts became harder to acquire, proper maintenance of oil drilling and production facilities became more difficult. When pipelines developed leaks, they were simply ignored, paving the way for widespread contamination of soil and groundwater.

Besides pointing out the problems, each assessment recommends specific solutions. In

certain cases, it might mean just removing contaminants from soil in a certain place. In others, it might mean creating an entirely new administrative infrastructure for monitoring wildlife or habitats.

Other nations have begun seeing the value of environmental assessments. Tanzania wants an evaluation of the impact of refugees on the country. After years of civil strife, Somalia, Ivory Coast and Congo badly need this kind of appraisal. There is no shortage of work, yet "I still have a one-month contract," Haavisto remarks. "People are always asking, 'When are you finished?' And I say that I'm finishing every month on the 11th." For nearly five years, that contract has been renewed, fortunately-or perhaps, unfortunately. Remarks Klaus Toepfer: "We were still optimistic enough to believe that postconflict assessment would not be something like a growing market."



SMOKE from oil fires around Baghdad and other wartime pollution could create long-term health hazards.

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