



## **Addressing the environment in military operations - Tools and lessons learned**

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*Ms Birgitta Liljedahl holds a M.Sc in geology, and has a background in the gold mining industry before she became an environmental consultant with focus on environmental impact assessments. Since 1996, she works as a senior analyst at the Swedish Defence Research Agency FOI, where she is head of the FOI support to the Swedish Armed Forces Medical Intelligence network, and have over the last ten years made environmental and health threat assessments for conflict and disaster areas including i.e. Mali, Somalia, Sudan and South Sudan, Darfur, Chad, CAR, DR Congo, Liberia, Kenya, Haiti, Afghanistan, Kosovo, Myanmar, Lebanon and Ache. Since 2006 she is managing a pilot project with UNMIS-S in South Sudan, with focus to develop tools for sustainable solutions in peacekeeping operations. She has been deployed with the Swedish Armed Forces to DR Congo and Kosovo, and with the Swedish Civil Contingencies Agency (MSB) to Kenya, and to Haiti after the earthquake in 2010.*

### **Résumé**

Challenges related to environmental impact and the need for sustainability solutions for military, and peacekeepers in conflict and disaster areas has been highlighted over the last decade, when it's been shown that the environmental legacy from operations and missions sometimes has been significant. Waste, sewage, hazardous waste, pollution and water and energy consumption are some key concerns. Moreover, an environmental impact from one actor (whether military or civilian) cannot be seen as a separate event. On the contrary, it is important to look at the cumulative footprint in an area of operation. For instance, operations in areas with limited water resources can pose a great concern, if the total, joint water extraction from all the actors present in an area, together with the local population, exceed an aquifers natural recharge rate, causing water scarcity. In order to minimize unintended environmental impact from military and peacekeeping operations, tools have been developed, including i.e. models for environmental baseline studies, environmental impact assessments, pollution prevention and environmental training and awareness. The presentation aims at discussing the need for sustainable solutions before-during and after operations, on both policy level and tactical level and to present some tools to assist in reducing the environmental footprint from operations.