

ICB PhD public presentations

LOCAL MANUFACTURING OF DRINKING WATER FILTERS IN RURAL AREAS OF DEVELOPING COUNTRIES

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Project Summary: Access to clean and safe drinking water remains a global challenge, as 2 billion people use a contaminated drinking water source. A broad range of solutions is available for drinking water purification - still, only few water purification devices reach rural areas in developing countries, where an urgent need exists. Reasons of failure are high cost of such solutions, and that low cost alternatives do not match the local needs. Further, the awareness and the knowledge diffusion of purification techniques remains limited. We hypothesize to overcome these issues using local manufacturing of drinking water filters. We educate local experts who are able to manufacture, test, repair, actively promote and distribute such water filters. To prove this concept, we conducted field studies in rural Colombia and Ecuador. This concept of local manufacturing can be applied to a variety locally needed goods, enabling local entrepreneurs to thrive and to advance the development in rural areas, with the aim of closing the gap between rich and poor.

CV. Olivier obtained his BSc. and MSc. in Interdisciplinary Sciences from ETH Zurich. In 2017, he started his doctoral studies at the Functional Materials Laboratory.