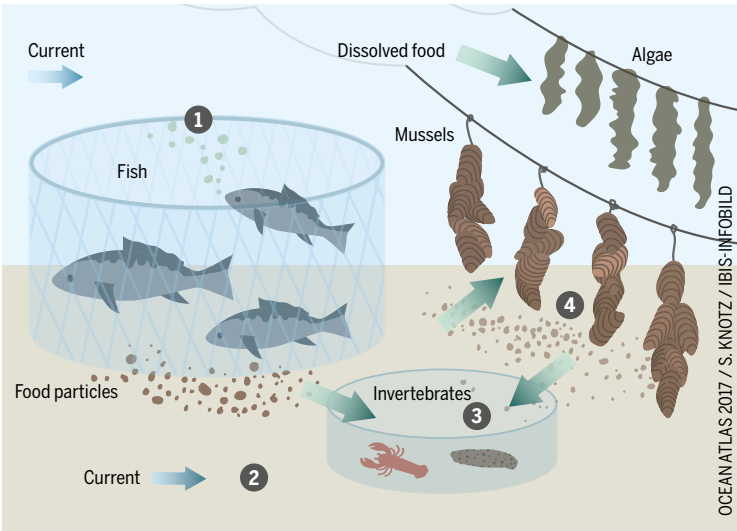


Another Way—Aquaculture as a Closed Nutrition Cycle



If farmed fish are kept in nets or cages and actively fed ①, their excretions normally cause the environment to become overfertilized (eutrophication). The exception: when other organisms on lower levels of the food chain are kept downstream ②. Shrimp, crabs, or sea cucumbers kept in cages ③ eat particles that sink to the bottom. Mussels ④ filter smaller particles out. And their excretions are metabolized by the algae and invertebrates. Unlike conventional fish farming, so-called integrated multitrophic aquaculture is an environmentally friendly approach that actually takes the surrounding ecosystem into account. However, it represents only a marginal share of global aquaculture, and the use of fish oil and fishmeal remains problematic.