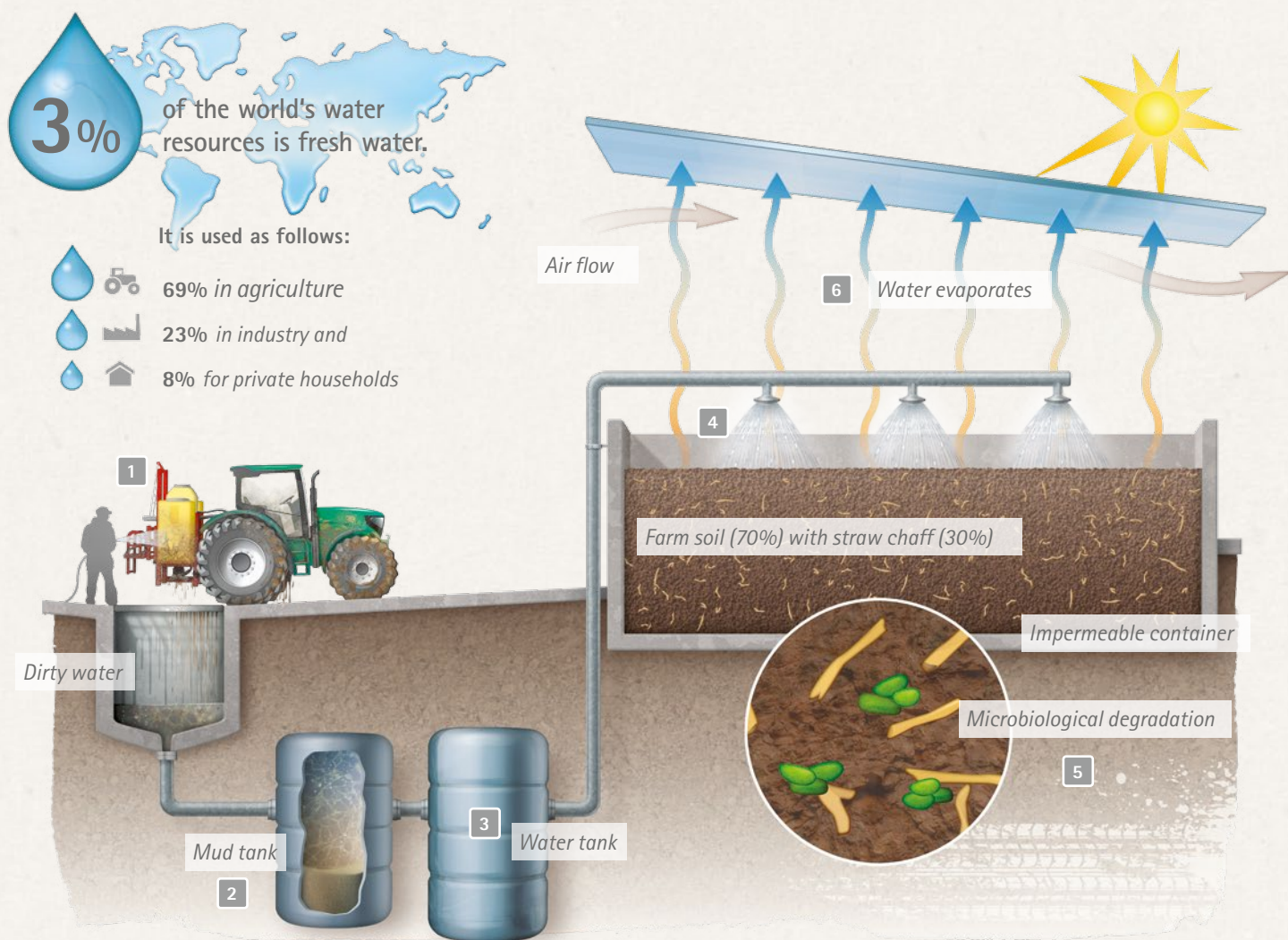


Protecting a precious resource

Water is the most vital resource for life, and water conservation is therefore an essential element of sustainable agriculture. Experts at Bayer CropScience have developed an innovative system for farmers that is designed to prevent contamination of surface waters by, for example, crop protection agents. Any pesticides in the rinse water that is left over after cleaning the farmyard are broken down in exactly the same way as they would be naturally – only more efficiently.



Biological agricultural cleaning system

The Phytobac™ system developed by Bayer experts ensures that contaminants cannot get into sewage systems or nearby bodies of water when spraying equipment is filled or cleaned on the farm **1**. The dirty water first flows into a mud tank **2**, where the rough dirt settles as sediment. The clear residual liquid is stored in the second tank **3** and fed in doses into the substrate container filled with farm soil and straw **4**. The straw serves as an additional source of carbon which promotes microbial degradation. Measurement and control elements regulate the soil moisture levels, creating ideal living conditions for microorganisms **5** such as bacteria and fungi. The enzymes in these tiny helpers break down residues of fungicides, herbicides and insecticides while the water evaporates **6**.