

Remove iron that interferes with Arsenic mobilization

Till soil and add iron reducing and iron accumulating bacteria such as *Thiobacillus ferrooxidans*, *Leptospirillum ferrooxidans*, *Desulfuromonas palmilatis*, *Geobacter metallireducens*, and *Shewanella oneidensis* etc.

Mobilize arsenic further and grow plants, and fungi that accumulate Arsenic

Till soil again and add detritus to decrease soil pH and grow non-edible plants such as of *Agrostis* genus, *Pteris* genus and non-edible arums along with hyperaccumulating fungus like *Sarcosphaera coronaria*

Harvest plants, and fungi to remove Arsenic by electrolysis and filtration

Dissolve biomass in water, which can also be used for generation of natural gas during the fermentation process and then use approaches for removal of Arsenic that are prevalent for removal from water.



Figure: Hybrid approach of Arsenic removal from soil in developing countries