

Farm-hacking open agricultural machines

Farm-hacking open agricultural machines: the role of peer-based open design communities in achieving sustainable production

SHORT ABSTRACT

Corporate R&D communities design for scarcity with planned obsolescence not as a bug but as a feature. Open design communities design for inclusion, modularity, bio-degradability, the shared use of machinery and combined with distributed microfactories, prefigure a demand-based economy 'of scope' that aims to replace a supply-driven economy 'of scale'. This intervention will offer a tour of such open agricultural machining communities, contextualized within the FLOK transition program towards a peer-based social knowledge economy underwritten by the government in Ecuador (flocksociety.org).

LONG ABSTRACT

In recent years, commons-oriented peer production has moved from the sphere of knowledge and code, to the sphere of open design and physical production. One of these emergent fields is that of open agricultural machining, where farmers, citizen scientists and engineers are collaborating to share and improve designs for appropriate technology for small eco-farmers and eco-villages. Amongst those projects are Open Source Ecology, developing 50 machines that constitute a 'civilization-in-a-box', the Open Tech Collaborative, constructing microfactories and the Open Source Beehives project; the Farm Hack community of young farmers in the US, the Slow Tools project, and Adabio Autoconstruction amongst the eco-farmers in France. This is significant because, while corporate R&D communities design for scarcity with planned obsolescence, open design communities design for inclusion, modularity, bio-degradability, and the shared use of machinery. The combined use of mutualization of knowledge (common pools of open source design), with the mutualization through distributed microfactories that can produce locally without globalized transportation, prefigure a demand-based economy 'of scope' that aims to replace a supply-driven economy 'of scale' that is destroying our eco-sphere. This intervention will offer a tour of such open agricultural machining communities, contextualized within the FLOK transition program towards a peer-based social knowledge economy underwritten by the government in Ecuador (flocksociety.org).