Design guidelines for the sociotechnical system scope

Life Cycle phase	Guidelines	Solution
Raw materials extraction and processing	Can raw materials be obtained with traditional and simple techniques accessible to an average person and in a sustainable way?	
Manufacturing	Is the production based on local skills?	
	Is the product/innovation's added value shared equally between the stakeholders of the value chain?	
	Can the product be manufactured using well-known, non-privatized techniques?	
	Do materials and characteristics of the product/innovation allow it to be produced with traditional and simple techniques accessible to an average person?	
	Can the product be produced in a distributed way (with small scale production units)?	
Use	Does the product/innovation promote a sufficiency-based way of thinking to reduce consumption?	
	Is the sociotechnical system accepted and controlled by the users' community	
	Does the product/innovation allow users to find a solution adapted to their own needs?	
	Does the product/innovation avoid the use of uncontrolled technologies (based on expertise and centralized tools)?	
	Does the product/innovation guarantee the user the accessibility to other technologies	
	Can the product be used with local resources (materials, infrastructure, skills, etc.)?	
End-of-life	Is the maintenance based on local skills?	
	Can the product be repaired with minimal and simple infrastructure?	
	Does the system prevent the obsolescence of each component?	

Design guidelines for the product scope

Life Cycle phase	Guidelines	Solution
Raw materials extraction and processing	Is the product designed in order to be adapted to local raw materials?	
Manufacturing	Does the product support the creative process of the users (and other relevant stakeholders) by allowing them to produce their own product?	
	Do the producers own the means of production?	
	Can the product be manufactured locally?	
	Does the user really need this product?	
Use	Can the product be acquired by most of citizens (including low-income people)?	
	Is the product designed to last as long as possible?	
	If the former product is still functional, why does the user want to change it?	
	Does the product encourage knowledge acquisition and sharing in the usage phase?	
	Does the product allow the user to understand how it fulfils the required function?	
	Can the product be redistributed and modified/improved without restrictions?	
	Is the product designed to be repaired and upgraded by an average person?	
End-of-life	Is the product designed to be repaired and upgraded by an average person?	
	Does the product encourage knowledge acquisition and sharing for maintenance and repair?	
	Can the user perform minimal reparations with standard accessible tools?	