

50 Innovative Products for Development

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S. No	Problem/Innovation		
1	Portable Battery/Fuel based Power Supply for Communications and Lighting designed to supply for a minimum duration during Emergency and Disaster – Flood/Storm/Quake/Landslides etc		
2	Wireless Communication Techniques for Emergency and Disaster – Flood/Storm/Quake/Landslides etc		
3	Wireless sensor networks for flood assessment – flow and level		
4	Flood-prone area habitants' data-base		
	Digital Methods for:		
5	1. Soil Moisture Management Methods		
6	2. Soil Moisture Assessment Methods		
7	3. Soil Quality Assessment Kit		
8	4. Irrigation-Water Quality Assessment Kit		
9	5. Sub-surface Drip Irrigation System		
10	Harvest Conveyors – Portable, quick-to-assemble and adaptable to gradient requirements with independent power supplies		
11	Manual/Power driven Loading/Unloading Machines for agro-produce handling		
12	Pit digging machine for plantation		
13	Trench digging machine for pipe laying (drip irrigation pipe)		
14	Quick Assembly, Portable, Precast Civil structures based Silos (rodent/pest free and weather free) for Grain Storage (measured) and Delivery (measured) along with facility for processing such as sieving/filtering/pulverizing/drying/packaging etc and storing thereon		
15	Quick Assembly, Portable, Precast Civil structures based roof for low cost housing		
	Garbage Management:		
16	1. Free water removal system from Wet Garbage with further treatment of water		
17	2. Water removal from wet Garbage by application of pressure with further treatment of water		
18	3. Dry/pressed wet garbage Briquetting for general heating purpose		
19	4. Kitchen waste to composting – Methods/techniques		
20	Intelligent Taps – Auto-close on filling – no wastage, effective utilization, easy to maintain		
21	Automatic Valve/Pipe failure detection and closing of appropriate valve/s to stop wastage in Water Pipe-Lines		

22	Effective Dust traps as a standard element in construction for household and office purposes		
23	Interlocked-Logic Systems for Safe Material Handling		
24	Material Handling Management System for 3-D Storage, Retrieval, Delivery and Accounting		
25	Container Design for retail products at super stores for Distribution, Storage, Access and Delivery		
26	Template-less print-transfer technique for textile printing for a zero-pollution Industry		
27	High wattage dual spindle equal and opposite direction rotation low weight and volume bldc motor for aviation		
28	Micro Magnetic Switch (2 stable state to n-stable state) for tactile perception		
29	Portable Traffic Management System for temporary use and for a designed duration of time using independently powered traffic lights along with any additional information		
30	Tyre pressure indicating system for automobiles		
31	Automatic Speed-Reducing System for safety of automobiles. It detects accident prone situation for all the vehicles concerned and reduces their speed automatically. Also, generates suitable audio and light alarms in the vehicles involved before it proceeds to do so when possible		
32	Vehicles that automatically abide by Road Rules of the Land with automatic audio and visual alerts		
33	Low cost, Low weight, 3 kW and 10 kW Steam/Gas Engine		
34	Biomass/Agro-residues Burners for Process Heat		
35	Solar Water Distillation Systems		
36	Waste Plastic-bags Compaction-Rolling Machine for storage and transport of plastic garbage		
37	Honeycomb structures using water/other waste plastic bottles for use as Partition Walls etc		
38	Micro/Mini Solar Pumps – Single Stage Centrifugal		
39	Micro/Mini Solar Pumps – Multi Stage Centrifugal, Submersible		
40	Self-cleaning and maintaining Mud/Sand filter system for Drip irrigation		
41	A System for quick development of prototype 3-D Surfaces and Textures		
42	Shaft based (Gearless) 1-n Power Transmission/Distribution System		
43	A Smart Campus-Assistant to assist movement and contact, and account all activities of a visitor on the campus		
44	A Smart Traffic-throughput assessment system for use in traffic control		
45	Moving Vehicle Seizing Fields/Roads/Paths for Defence application		
46	Real-Time Discharge, Recharge, Level and Head parameter sensing and acquisition for bore wells		
47	A System that assembles holes, tapped holes and bolts into a plate/surface in terms of elements such as bushes and threaded bushes and bolts, along with spacing elements and filler for rapid prototyping		
48	CSP autoclave/furnace for pottery/earthenware/earthen pipes		
49	Design of a Propeller Fan system with adjustable orientation of fan axis in 3-D		
50	Variable area Jet-Nozzle Design for Jet Engine		

