

PART III

INNOVATIONS for HIMACHAL PRADESH

This section contains details of innovations which are deemed suitable for introduction in Himachal Pradesh





Arvindbhai Patel
Gujarat

Auto Air Kick Pump

Imagine being stranded on the road with a two wheeler with a puncture- a flat tyre. This innovation is a low cost, portable, compact aid to inflate tyre tubes of any vehicle having kick start or auto start mechanism so as to fix the problem on the spot and enable the rider to reach nearby gas station or repair shop.

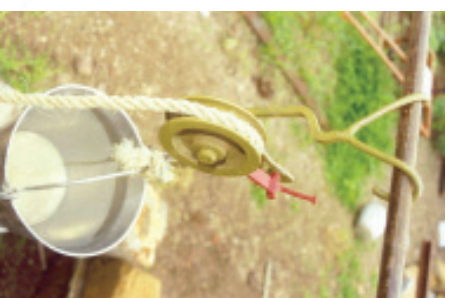
This device cleverly uses the air inside the compressor, so that, while kick starting, this air is utilized and transferred to the tube. A pinch of polymer granules is also inserted to seal the leakage in the tube.



Pulley with stopper

Millions of villagers in India face the problem of the hoisting rope sliding away inside the well when left free, with chafing of hands and crashing of bucket. This simple, low cost innovation is a pulley stopper that solves the problem.

A ratchet is attached to a pulley for preventing the movement of rope towards the well thereby reducing slippage, accidents and injuries to women and children. The innovation is available in three models - Ganga, Narmada and Saraswati.



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Amrutbhai Agrawat
Gujarat

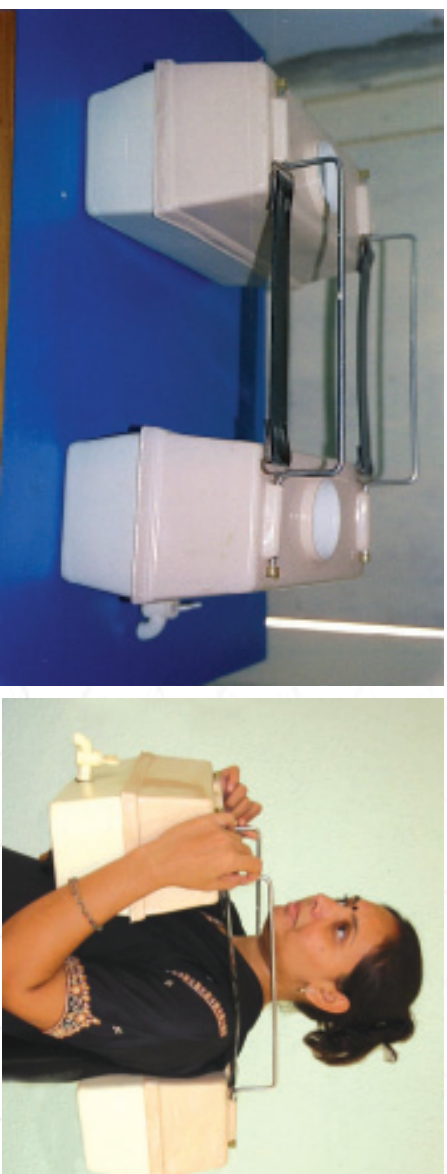
“Jalpari” - The water carrier

Every village in India has women who walk miles with heavy water pitcher on their head which results in considerable discomfort and long drawn injuries. This innovation is an alternative and consists of a shoulder slung unit fixed with water canisters balanced on either side.

The carrier has two washable plastic containers of 20 liters capacity each in the front and the back. Metallic handle grips for holding and picking, a soft flexible shoulder strap and a tap for taking out water are some of the features of this versatile unit.



Madhav Sawant
Maharashtra



Fruit Harvesting Device

Farmers all over India need a simple device that can reach tall branches of trees to cut and harvest thousands of fruits per day. This innovative device with unique profile and cutting action can be used to harvest fruits quickly, saving time and increasing output.

The novelty lies in the design of replaceable cutting blades and the hooking angle given to the oval shaped ring that assists in harvesting the fruits on upright branches. It is light weight, durable and is suitable for harvesting fruits like mango, safota, guava, orange, etc.

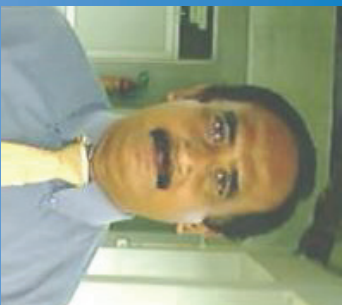


Madhav Mahajan
Maharashtra

Beauty Care Umbrella

Protection from harsh rays of the sun is a requirement in most parts of a tropical country like India. An umbrella made from traditional yet multifaceted material is a boon for the common man.

This innovative product is a durable, stain free, water proof umbrella produced from muga silk. It has a pleasing golden shine which illuminates colour and protects from UV radiations up to 80 % as per laboratory tests, better than that offered by conventional umbrellas.



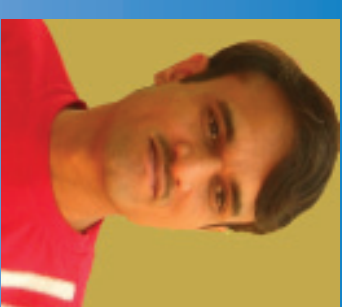
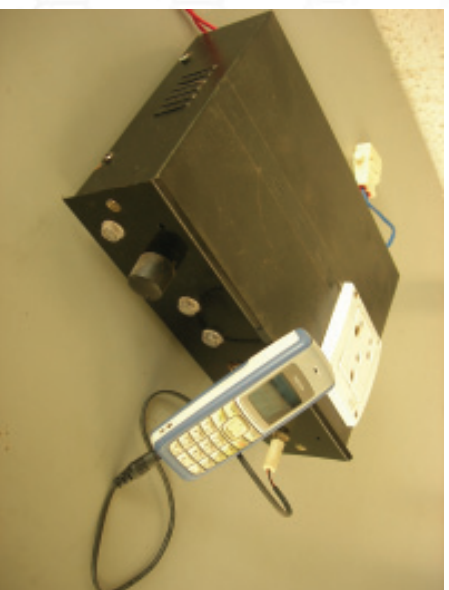
Dulal Choudhary
Assam



Mobile operated switch

Imagine the village where the farmer has the luxury of being able to stay at home and switch his pump in the faraway field on or off as required during the day or at night. This is made possible by this brilliant and revolutionary innovation which uses the power of mobile telephony to trigger electrical control switches.

The farmer can remotely know the status of the pump in his cell phone and turn the motor on or off by calling the particular configured number. It activates the switching by certain number of rings and hence incurs no call charges.



Prem Singh Saini
Haryana

Hand operated water lifting device

An efficient way of pumping water to meet requirements in a cost effective way is always a challenge in rural India.

Developed from locally available materials, this hand operated water lifting device is simple in design, has high discharge at low cost compared to conventional hand pumps, bucket pump, and bicycle operated pumps.



N Sakthimainthan
Tamil Nadu



Multi Purpose Wood-working Machine

Many small carpentry workshops have difficulty in using multiple machines due to high initial costs, space constrains and maintenance considerations.

This multipurpose machine is built to address all major workshop needs, allowing completing the sequence of woodworking operations in one place, and allowing better control on finished product, using less space.



08



Ghonakanta Gogoi
Assam

Sanitary napkin making machine

Sanitary napkins, a universal product, have a very low penetration in India due to high selling cost and cultural trend of using cheaper but unhygienic clothes. Enter this machine, which produces low cost hygienic solutions at a cost appealing to common women.

The machine prepares sanitary napkins with identical absorbent material as that of conventional ones by cutting down the cost in production. It requires 3 to 4 persons to produce 2 pads per minute. Costing less than half of conventional options, this machine produces sanitary pads @ Rs.1/pad.



A. Murruganandam
Tamil Nadu



Maruti Jhoola- the health care chair

Modern life with its fast pace and sedentary lifestyle has created the need for solutions incorporating relaxation and invigoration. Maruti Jhoola is a unique health chair with multiple capabilities, functions and settings for various postures and seating dynamics.

It is ergonomically designed and serves the purpose of seating as well as exercising, with a capacity to accommodate a person weighing 120 kgs. It can double up as a hammock or a jhoola. The health chair has established itself as useful for people suffering from arthritis and joint ailments.



Sakrabhai Prajapati
Gujarat



M. Nagrajan
Tamil Nadu

Garlic Peeling & Lemon Cutting Machine

Peeling of garlic in a fast effective way is a requirement in the pickle industry. This product is a food-grade, fully automated machinery designed for bulk quantity peeling of garlic without damaging them and has wide application in making pickles and herbal medicines. The machine is energy efficient, saves labour, with low capital and operating cost. It frees the industry from capacity constraints caused by shortage of labour in peak seasons

The second product is also used in pickle industry, but for cutting lemons. It is a cost effective machine, having innovative design, with continuous feeding system. It performs precise and standard cutting of large quantity of lemons in uniform shape and sizes. It can be operated by one person.



Manual Milking Machine

Fast and efficient milking of cows is a requirement across rural India and this product is a efficient step in that direction. The product is a low cost, manually operated device that helps farmers to milk the animal hygienically and reducing drudgery in the process.

It is easy to use with simple controls and operations and can also be operated by women as well. The creation of suction and low vacuum makes it suitable for other applications.



Raghav Gowda
Karnataka

Manual Wood Cutting & Bamboo Cross Cutter

Cutting of wood effectively and efficiently is achieved by this machine. The equipment is cost efficient, and is manually operated with both hand and foot pedal options. Most importantly it is mobile, and can be taken to any worksite and has more productivity compared to manual sawing.

This equipment consumes lesser time and labour compared to available saws and has a mechanism and linkages similar to manually operated sewing machine. The work of three labourers can be done by one labour using this machine.



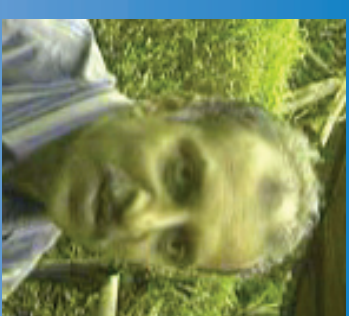
Karuna K. Nath
Assam



Modified Hydro electricity Turbine

Electricity supply in the hills is always a problem with either the difficulty of access or distribution or disruption and blackouts.

This equipment is a hydro electric turbine, and is specifically designed for the hills, costing Rs.30,000 initially. It meets the individual electric needs of a rural household.



G. K. Ratnakar
Karnataka

Power Generation through Sewage

We are in the century where finding alternate energy sources is a critical necessity. This system encapsulates energy generation using sewage water.

This arrangement is a system to generate electricity through slow moving sewage water passed through a cylindrical drum. The helical blades inside the cylindrical drum provide desired efficiency to the system.



K. Balakrishna
Karnataka



Hydro generator using bamboo composite

Energy generation and pumping water for irrigation is a perennial rural need. The innovator has used the bamboo powder, used as a by-product from a bamboo lathe machine also invented by him, and mixed it with a resin to create the strong material to fabricate the lightweight hydro generator which helps in generating energy.



Imli Toshi Nammo
Nagaland

Panihari: A head load reducing device

Rural women walk many tens of miles with heavy load on their head which causes stress, discomfort and eventually head and neck injuries.

The product is an ergonomically designed device fixed on top of the head, with two extended supporting rods from the sides of the device. The device transfers the weight carried on the head to the shoulders, which is better positioned to carry weight.



Khimjibhai Kanadia
Gujarat





Innovation



Investment

Enterprise



Honey Bee Network

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