Mrepel!

Mrepel- a simple red light led lamp having neem, eucalyptus and camphor oils *which-*

1. Surface area is high to have a much greater rate of vapourization
2. A small wind fan can be switched on when there is a need for air to increase the vapourization speed. The fan can use small engines running from the natural sources of energy or available batteries.
3. A sun lens to focus some solar energy to the oils to vapourize to increase efficiency.

What are the advantages?

Appropriateness- can work for 8 hours at a stretch and repel mosquitos
Desirable- Not produces a sound that can cause disturbance to sleep. Mrepel has a pleasant aromatic smell.
Easily acceptable- as there is no objectionable parameter that evokes religious sentiments(like agarbattis)
Eco-friendly-Mrepel is not made using harmful chemicals like DEET, neither it is polluting(reduced smoke and net CO_2 emission) as we will be using only natural oils or waste cow dung/biogas.
Ergonomics-It's based on people in rural villages using camphor and neem leaves oil in Diya to repel mosquitos
Indian-ness- Mrepel uses "jugaad" or frugal use of resources in villages- Batteries(which they use in Radio) or LED Bulbs. We have learned naturally from our environment and used the primary energy sources sun and wind, as well as natural energy sources like oils/biogas from cow dung or waste energy
Health- Mosquitos causing Dengue are generally more in the morning. Using the high natural energy in the morning, dengue mosquitos will be efficiently repelled.
Cost- It will cost less than Rs 20 per device. The price to make it will be less than Rs 15. We can even create a small research lab in villages to employ the school children to explore possibilities of developing better solutions and improve existing methods
The social contribution-We can even have a "business model"- the collaboration with various NGOs
Intriguing- Adding the fan and lens makes it exciting, a lot of press coverage, newspaper journalists, scientists, engineers can view the device as highly innovative and publish articles regarding the same.

Stakeholders-
Investors/ NGOs(for collaboration and help in the research)
Customers- Rural Villagers and Daily Wage Labourers with income around Rs 500 a day. Doctors advicing the product will make it more trustworthy for the villagers to buy instead of conventional “COIL” available which deters human health.

Brainstorming for Product Design-
Style-The product should look good and be appropriate.
Economics- What is the income of the target audience
Technology- Available devices- Coil, Mat, Mosquito Nets. The hydroelectricity, wind, and solar energy depend on the terrain and climate and other geographical conditions.We thought of making a solar farm using photovoltaic cell(which produces <10000W/m2)

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