

10-17-2002

## New Invention in El Salvador

LADB Staff

Follow this and additional works at: <https://digitalrepository.unm.edu/noticen>

---

### Recommended Citation

LADB Staff. "New Invention in El Salvador." (2002). <https://digitalrepository.unm.edu/noticen/9020>

This Article is brought to you for free and open access by the Latin America Digital Beat (LADB) at UNM Digital Repository. It has been accepted for inclusion in NotiCen by an authorized administrator of UNM Digital Repository. For more information, please contact [amywinter@unm.edu](mailto:amywinter@unm.edu).

## New Invention in El Salvador

*by LADB Staff*

*Category/Department: El Salvador*

*Published: 2002-10-17*

A Salvadoran scientist has invented a device that could be the salvation of what little is left of the forests and woodlands of El Salvador. It could also revolutionize energy technology worldwide, drastically reduce the use of fossil fuels in all applications, and, ecologically at least, be the salvation of the planet. Rene Nunez will receive recognition on Oct. 29 from the UN for his achievement. He will receive an award at a ceremony in New Delhi, India, for what he describes as a new process for the production of heat and energy that does not contaminate the environment.

The process has been incorporated into an invention he calls a "turbo-cooker" that uses a few small pieces of wood to generate a great deal of heat. He invented it in El Salvador at his own expense, an expense that turned out to be huge, and not only in money. Nunez created the device to minimize the use of scarce firewood in the country. It is patented both in El Salvador and in the US. It emits no toxic gases, only carbon dioxide and water, which led him to also call the thing "the machine that breathes." "The invention is integrated into the biological cycle of nature," he said, "carbon dioxide, heat, and water are three elements that plants absorb and transform into oxygen."

He got the idea while writing a chapter for a book, *Historia natural y ecologia de El Salvador*, at the behest of a friend. "When I finished the chapter, I realized that firewood was the most important energy resource in the country," he said. Looking further into the subject, he discovered that there was nothing written on the subject. "The investment for resolving the reduction of the use of firewood is nil." He didn't even find anything on the Internet. So he decided to build something himself. Even though serious investigation began with the book chapter, his interest in combustion has been life-long.

When he was eight years old, he burned down a building while investigating the phenomenon whereby dry grass burns a lot faster than green. The whole neighborhood turned out to control the blaze. The cooker took years to perfect.

Nunez was obsessed with the project, spending all his money on it and eventually descending to a condition of abject poverty. He lost family and friends over it; even his wife left him. "She lost faith in me," Nunez said. "And she got bored looking at a person who day and night was thinking about an invention that he believed would change the world and she thought was only a dream and delusions of grandeur." But the delusion eventually found its way into the material world.

Nunez built the first prototype of the unit, and having done so obtained funding from the Fondo Iniciativa para las Americas El Salvador (FIAES). With that support, he took the cooker into the field for testing in rural Chalatenango. He chose the place because it was substantially deforested; firewood was hard to come by. After a year of testing, he was satisfied that the unit was popularly accepted and that it reduced consumption of fuel by a nine to one ratio. This was the goal. Twigs

could be used rather than logs; twigs grow back. Another goal was to stem the high incidence of respiratory disease, common among the rural poor, caused by smoke from open indoor fires.

As for saving the world, Nunez says that the principle can be incorporated into any device that burns fuel, from gas stoves to automobiles. His reasoning is this: "If my cooker can reduce 96% of the use of firewood compared to the traditional stoves in our country, this means that the emissions from global warming can be reduced in the cooking sector by 96%. When the Kyoto Protocol is asking for 5%, which is sad, we can have 96%; that's incredible."

Nunez is not alone in his enthusiasm. He says he has the backing of the Instituto de Tecnologia Avanzada y Combustion in Canada, the UN, and other institutions where laboratory tests have been conducted. With the recognition that he will gain from the Organizacion de Iniciativa de Tecnologia Climatica in India, this Salvadoran scientist who has gone barefoot to build a machine to save the world thinks that now his life will change, "because I believe that a person could only with great difficulty have borne what I have had to bear without ending up in a psychiatric hospital. It has cost me. I have cried tears of blood."

-- End --