2012 Winner of the $100,000 Lemelson-MIT Award for Global Innovation
Ashok Gadgil – Inventing for a Better World
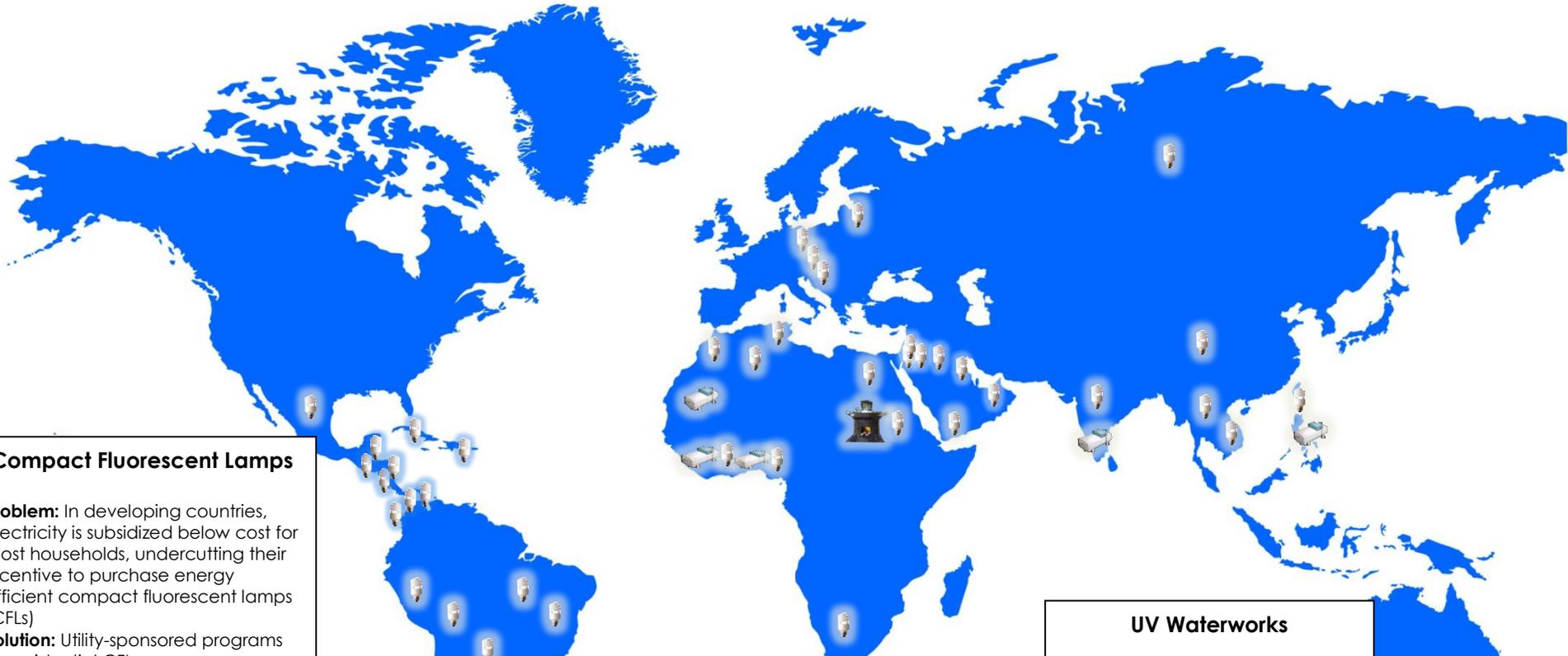
Compact Fluorescent Lamps

Problem: In developing countries, electricity is subsidized below cost for most households, undercutting their incentive to purchase energy efficient compact fluorescent lamps (CFLs)
Solution: Utility-sponsored programs for residential CFLs
Impact:
- Reduces costs and carbon emissions, improves electric supply and energy efficiency
- Estimated participants now more than **100M**

Used in: Algeria, Argentina, Belize, Bolivia, Chile, China, Costa Rica, Cote d'Ivoire, Cuba, Czech Republic, Dominican Republic, Egypt, El Salvador, Guatemala, Honduras, Hungary, India, Iraq, Jordan, Kuwait, Latvia, Lebanon, Mexico, Morocco, Nicaragua, Nigeria, Palestine, Panama, Paraguay, Peru, Philippines, Poland, Russia, South Africa, Sudan, Thailand, Tonga, Tunisia, UAE, Uruguay, Vietnam, and Yemen

Berkeley-Darfur Stove

Problem: 80% of displaced persons in Darfur are female and walk up to **7** hours, **3-5** times per week in search of firewood – making them vulnerable to violence
Invention: Berkeley-Darfur Stove – a fuel-efficient and cost-effective stove
Impact:
- Saves **55%** of fuel compared to traditional stoves
- **20,000** stoves produced since 2005, helping **125,000** women and their dependents in Darfur with improved safety and cost savings

Used in: Darfur with expansion plans for Ethiopia

UV Waterworks

Problem: In 1993, an outbreak of Bengal Cholera killed more than **10,000** people and infected drinking water in India
Invention: UV Waterworks – an affordable and inexpensive technology – uses UV light to disinfect drinking water for about **2** cents per **10** liters
Impact:
- Provides clean drinking water to more than **5 million** daily
- Annually avoids **1,000** statistical deaths of young children from diarrheal diseases

Used in: India, Liberia, Nigeria, the Philippines and Ghana with expansion plans for Bangladesh