

Guyana

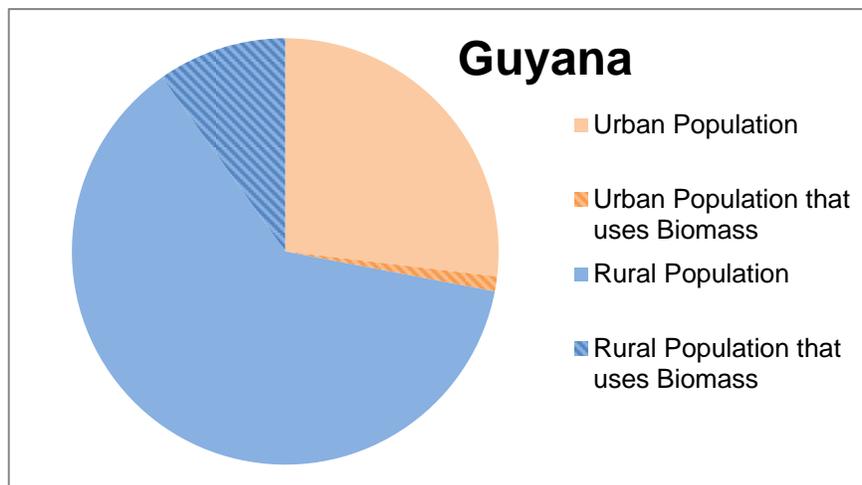


Total population*	800,000
Urban (%)	28
Rural (%)	72
% Population that uses biomass*	6
% rural**	13.6
% urban**	<5
% Population with access to LPG and electricity**	50
Number of households that use biomass**	14,431
Number of annual deaths from HAP 2012*	108
Number of annual child deaths from HAP 2012*	3
Price of LPG (25 lb tank)	NA
Price of electricity (Kw/h)	NA
Price of Firewood	NA

HAP: Household Air Pollution

*WHO observatory data base

**GACC (Global Alliance for Clean Cookstoves) web page



History of Efficient Cookstoves

Number of efficient cookstoves distributed so far

47

- Hinterland areas are home to about 200 Amerindian communities representing about 9.3 % of the country's population
- The majority of the residents use wood as fuel for cooking, and for lighting in some cases. Candles and kerosene lamps are also common light sources
- 2013 - 507 solar cooking stoves, construction and demonstration of 15 energy efficient wood stoves and installation of 2 bio-digesters in 7 communities in regions 1,7, 8 and 9
- 2015 - 50 forced-draft prefabricated energy efficient stoves (designed by the Energy Research Institute of India) to five communities in regions 1 and 2
- 4 Energy Efficient Institutional Wood Stoves to 3 schools in Region 8

Clay, clay bricks and banana sucker were used to construct energy efficient wood stoves:





Industrial model:



Results:

- consumed 78% less firewood than the Existing stove
- had a 27% reduction (7 mins) in cooking time versus the existing stove
- level of smoke in the kitchen was dramatically reduced

Biodigester:



Challenges:

- remoteness of villages making the extension of existing electricity grids not feasible
- low, dispersed population and the low demand for electricity
- higher specific cost for hinterland electrification which is often difficult to justify from a strictly economic perspective when the benefits will be mostly intangible
- high transportation cost to provide modern fuels such as LPG, kerosene, gasoline and diesel and
- the low spending power of the population