

# Central America Improved Cookstove Toolkit Framework Proposal & Challenges



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# Why Improved Cookstoves

## Benefits of ICS

Energy Efficiency → facilitating efficient use of biomass fuels  
Public health → reduced indoor air pollution (IAP)  
Gender → less time collecting fuel wood + less exposure to IAP  
Climate Change → lower wood consumption;  
sustainable future firewood supplies

## What has been done in CA?

SICA, Action Matrix for Energy Integration (2009-2020):  
→ 10% reduction in fuelwood consumption by 2020  
→ installation of 1 M ICS  
Technical aspects → improve quality of ICS  
ICS Certification Center at Zamorano Univ. (Honduras)  
Financing mechanisms → microfinance, subsidies



# The Need – ICS Toolkit

Why do  
an ICS  
Toolkit  
for CA?

ICS = technical + social /cultural + financing dimensions  
increase users' acceptance and adoption levels  
increase sustainable provision of ICS

Compile a methodology that incorporates technical, social, and financial aspects

What it  
aims at

Provide integrated and easy consultation tool for key stakeholders (governments, NGOs manufacturers, users);

Define critical parameters for a successful ICS programs including technical, social and financial dimensions;

Help users, governments/donors regain confidence on ICS technology.

How?

Literature review → global and regional experiences

Survey → ongoing assessment of sociocultural/gender aspects

Interview → relevant stakeholders implementing ICS programs in CA

Field work data → gathering data through partnerships with FS / ECLAC



# Central America in a Snapshot

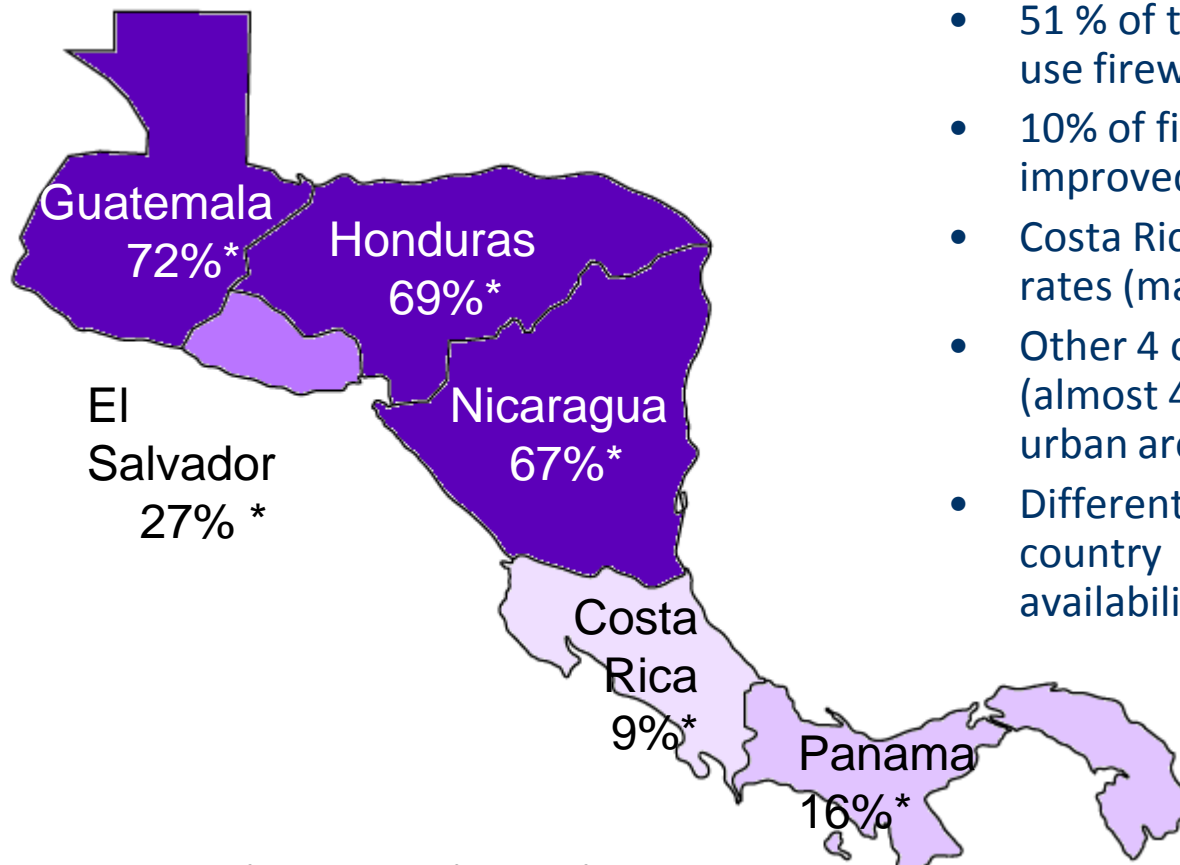


	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama	CA
Area (km <sup>2</sup> )	51,000	21,040	108,890	112,090	130,370	75,520	498,640
Population (million)	4.40	6.76	13.03	6.97	5.67	3.29	39.89
GDP/ capita (US\$)	10,735	7,564	4,907	4,275	2,698	11,361	
Population below poverty line (%)	22%	37%	56%	51%	48%	37%	46%
Urban population (% total)	62%	60%	47%	47%	59%	71%	54%
Biomass residential consumption (%)	19%	41%	50%	42%	46%	19%	39%

Sources: World Bank, WDI, UNDP development indicators, and extrapolated data from National Energy Balances of each country. (2008 data)



# Firewood Use in Central America



\* Percentage of people using firewood for cooking

- 51 % of the people in Central America use firewood for cooking
- 10% of firewood users have an improved cookstove
- Costa Rica and Panama, lower use rates (mainly rural users)
- Other 4 countries, higher use rates (almost 40% of firewood users live in urban areas)
- Different climate areas within each country → impact on resource availability and stove material

# Challenges for Scaling-up ICS in CA (1/2)

Firewood users located in dispersed, difficult terrain and hard-to-reach rural areas

- increased use of locally built ICS
- costly training and supervision
- industrial ICS are unavailable
- high costs: transportation/manufacturing

Low quality of ICS

- quality control is lax and difficult

A history of highly subsidized (“give-away”) programs

- hinders large-scale commercial viability

Lack of awareness about open fires health hazards

- use of open fires and ICS



Plancha, Guatemala



Ecocina, El Salvador

# Challenges For Scaling-up ICS in CA (2/2)

Cookstove users

Firewood Collection

Decision Making



Lack of data on users' perspective

Low motivation, due to lack of awareness about open fire problems

Lack of data on ICS adoption and impact (M&E)

**Results in user's rejecting ICS and on the technology's discredit**

Health Impacts

# Preliminary Results of Survey

Often use of open fire

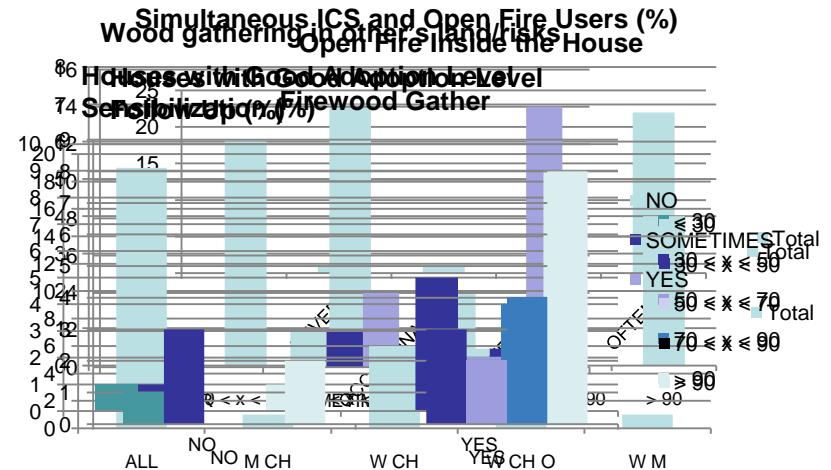
Mixed use of Open Fire & ICS

Firewood gathering presents risks

Firewood gathering done by whole family

Increasing sensibilization campaigns increases adoption levels

Increasing M&E increases adoption & impact levels





# Next Steps

- Complete survey
- Gather field information
- Draft the ICS Toolkit

**Most importantly would like to hear your feedback and experiences with ICS programs, in particular in Central America**

Invitation to participate in the survey:

[www.surveymonkey.com/s/XBBXN6R](http://www.surveymonkey.com/s/XBBXN6R)



# Thank You



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