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 የውሃ ፣ መስኖና ኢሌክትሪክ ሚኒስቴር 1
 The Federal Democratic Republic of Ethiopia
 Ministry of Water, Irrigation & Electricity

ቁጥር MINIE/260/01/332

Ref.No

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Date **22 OCT 2015**

To - GIZ EnDev Ethiopia, Addis Ababa

Date: October 20, 2015

Re: Notification of stove tests result

Dear Sirs,

This is in reference to GIZ EnDev Ethiopia's request for joint stove test on a letter dated on April 26, 2015.

In response to the request, stove tests were undertaken jointly, and the report has also been written up & completed. Hence, we hereby notify that the below mentioned description and figures of test results concerning Chigr Fechi multipurpose stove are official to agencies and others bodies willing to promote the stove.

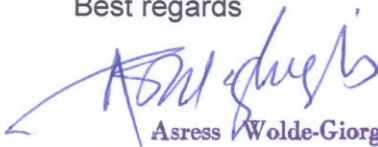
Chigr Fechi multipurpose stove	
Type	Household multipurpose mud stove (<i>fixed & chimney integrated</i>)
Name	Chigr Fechi – meaning “ Problem solver” in Amharic language
Designer/Developer	Die Ofenmacher e.V. – German NGO
Fuel used	Fuel wood, Agricultural residues, saw dust & dung
Country of origin	Germany
General Descriptions	<ul style="list-style-type: none"> It is a standardized mud stove with chimney integrated, and be built with local materials such as clay soil, ash, sand and straw. The stove has two combustion chambers, where the major is for <i>Injera baking</i>, and other stove used for other cooking tasks such as preparing <i>wot</i> (typical Ethiopian sauce), boiling cereals, & other smaller cooking tasks. <ol style="list-style-type: none"> <u>The injera stove</u> – it is cylindrical in shape having 25 cm height. The diameter of cylinder depends on the specific Mitad's diameter in each households,



	<p>2. <u>The cooking stoves</u> – have two pot holes, the first and primary pot hole or combustion chamber with 24 cm inside diameter with its 25 cm height, while the secondary pot hole has baffle integrated & has also a 24cm inside diameter . It is built 12 cm higher than the primary/first stove</p> <ul style="list-style-type: none"> • The integrated chimney has an overall height of 156cm and built from piled up mud bricks. The bricks has 24x24x6cm dimension and has approximate diameter of 14 cm in the center.
<p>Fuel saving and thermal efficiencies</p>	<ul style="list-style-type: none"> • Based on Controlled Cooking Test (CCT)¹ test on the Injera baking stove, it has attained a fuel saving efficiency of 54 % compared to the traditional open fire. • The smaller cooking stoves has thermal efficiency of 25% , based on Water Boiling Test (WBT)² result. This efficiency translates to fuel saving potential of up to 50% compared with three stone stove.

All claims beyond the above performance measure results by other external bodies are not the responsibility of Ministry of Water, Irrigation and Energy.

Best regards


 Asress Wolde-Giorgis
 Alternative Energy Technology
 Development & Promotion Directorate
 Director

