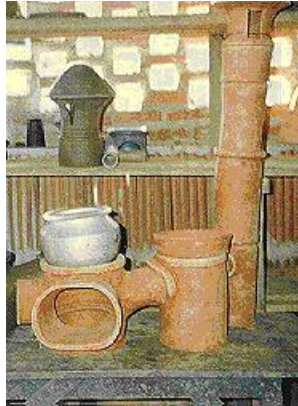


RE Practices in Sri Lanka - Domestic Stoves

Solid Stoves With or Without Chimney



Stove type: Improved
 Construction material: Clay/Mud
 Chimney: no
 Fuel type: Wood
 Country: Sri Lanka



Stove type: Inside parts of an improved stove (ceramic inserts), which will be covered by clay/mud
 Construction material: Ceramic
 Chimney: yes
 Fuel type: Wood
 Country: Sri Lanka



Stove type: Inside parts of an improved stove (ceramic inserts)
 Construction material: Ceramic
 Chimney: yes
 Fuel type: Wood
 Country: Sri Lanka

Domestic Stoves - Portable Ceramic or Pottery Stove



Stove type : Improved
 Construction material: Ceramic
 Chimney : no
 Fuel type : Wood
 Country : Sri Lanka

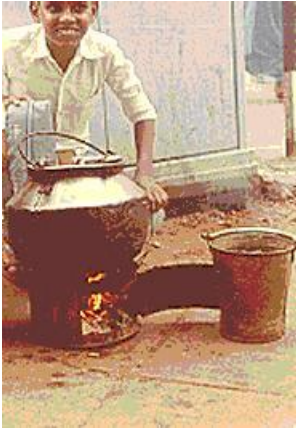


Stove type : Improved
 Construction material: Ceramic
 Chimney : no
 Fuel type : Wood
 Country : Sri Lanka



Stove type : Traditional
 Construction material: Ceramic
 Chimney : no
 Fuel type : Wood
 Country : Sri Lanka

Domestic Stoves - Potable Metal Stoves



Stove type : Improved
Construction material : Metal
Chimney : no
Fuel type : Wood
Country : Sri Lanka

Institutional Stoves - Solid and Metal Stoves With or Without Chimney



Stove type : Traditional
Construction material : Mud
Chimney : no
Fuel type : Wood
Country : Sri Lanka

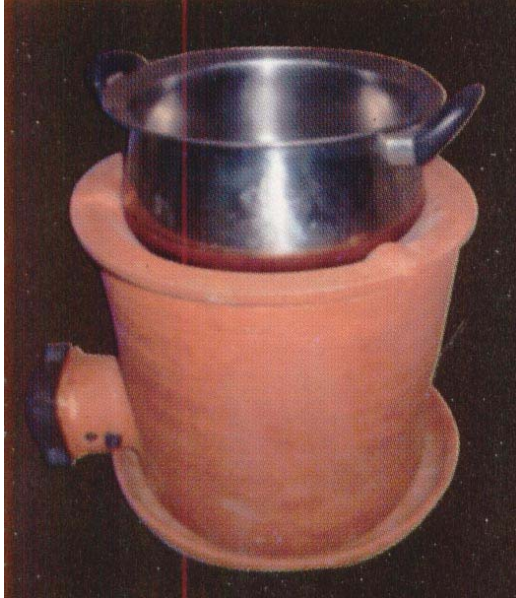


Stove type : Improved
Construction material : Ceramic
Chimney : no
Fuel type : Wood
Country : Sri Lanka

Source: RWEDP, FAO
www.rwedp.org

RE Practices in Sri Lanka - Domestic Stoves

Domestic Pottery Stoves by Mr. Riyad Ismail



Stove type	: Ez Turbo Charcoal Stove
Construction material	: Burned Clay, 12V DC blower,
Chimney	: No
Fuel type	: Charcoal (can use wood, saw dust, coconut shells as substitutes)
Efficiency	: Not available
Dissemination	: ~ 700 units
Price	: ~ LKR 2,200 (2008)
Year of Introduction	: 2008
Country	: Sri Lanka

Source:

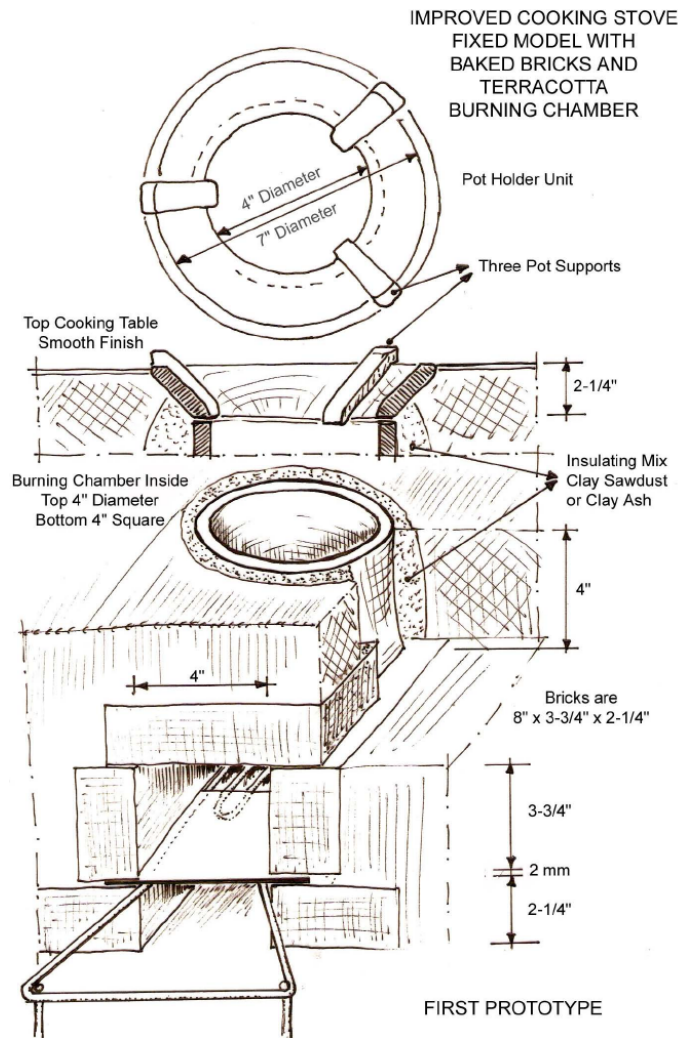
Mr. Riyad Ismail,
503/5, Halbarawatte,
Thalahena, Malabe, Sri Lanka

Authorized Distributor:

240/B, Koswatte
Thalangama North
Tel. 011 7913345

RE Practices in Sri Lanka - Domestic Stoves

Domestic Stoves - Solid Stoves With or Without Chimney



Stove type	: Single pot stove ICS
Construction	
Material	: Clay, Burned bricks, Terracotta pot liner, Metal plate with grill
Chimney	: No
Fuel type	: Wood
Country	: Sri Lanka, Specially used in Northern Sri Lanka

Source: HUYS ADVIES, Improved Cooking Stove (ICS), Tsunami Relief & Rehabilitation Programme, by Sjoerd Nienhuys, Shelter Advisor Jaffna and Vanni Districts , Sri Lanka, 2006

RE Practices in Sri Lanka - Domestic Stoves

Domestic Wood Gas Turbo Stove by NERD Centre of Sri Lanka



Stove type:	Wood gas stove, Single pot metal stove with ceramic liner and FD fan
Developed by	: NERD Centre, Sri Lanka
Construction material	: Metal, Ceramic liner, ID Fan
Chimney	: No
Fuel type	: Wood pieces
Power consumption	: 2W, 12V DC
Cooking time	: ~ 40 mts per loading of 600g of wood pieces
Cost	: ~ Rs. 5,000
Technology Transfer	: Done
Produced & marketed by	: NERDC Licensees
Country	: Sri Lanka

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdccentre@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka - Domestic Stoves

Domestic Wood Gas Natural Draft Stove by NERD Centre of Sri Lanka



Stove type:	Wood gas stove, Single pot metal stove with ceramic liner – Natural draft
Developed by	: NERD Centre, Sri Lanka
Construction material	: Metal, ceramic liner
Chimney	: No
Fuel type	: Wood pieces or small sticks
Cooking time	: ~ 45 mts per loading of 650g of wood pieces
Cost	: ~ Rs. 4,000
Technology Transfer	: Done
Produced Marketed by	: NERDC Licensees
Dissemination	: > 30,000 units
Country	: Sri Lanka

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdc@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka – Biomass Rice Cooker

Domestic Rice Cooker Operated on Biomass by NERD Centre of Sri Lanka



Features:

- Can cook 1 kg rice using 02 coconut shells
- Cooking time ~ 40 min.
- No overcooking or burning of rice
- No blackening of rice pan.
- Can keep rice warm for around 08 hrs.
- Can boil 3 liters of water.
- No special attention required.

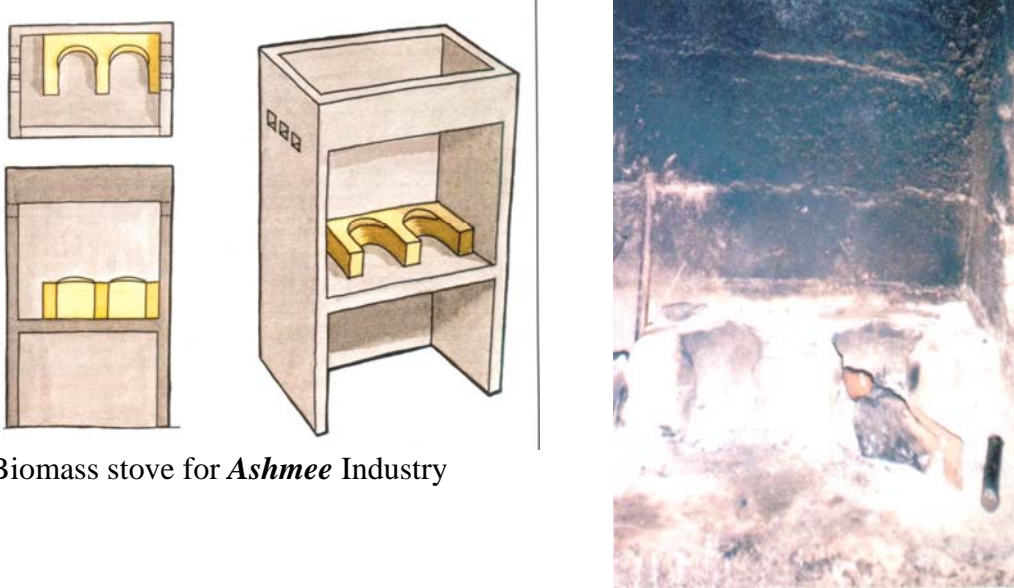
Name of the cooker	: Biomass Operated Cook Stove
Developed by	: NERD Centre, Sri Lanka
Construction Materials	: Metal
Fuel type	: Coconut shells (02 nos.), other biomass possible
Cost	: ~ Rs. 4,000
Technology Transfer	: Done
Produced & marketed by	: NERDC Licensees
Dissemination	: > 2,000
Country	: Sri Lanka

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdccentre@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka – Community/Industrial Cook Stoves

Community/Cottage Industry Cook Stoves – SRI LANKA



Biomass stove for *Ashmee* Industry

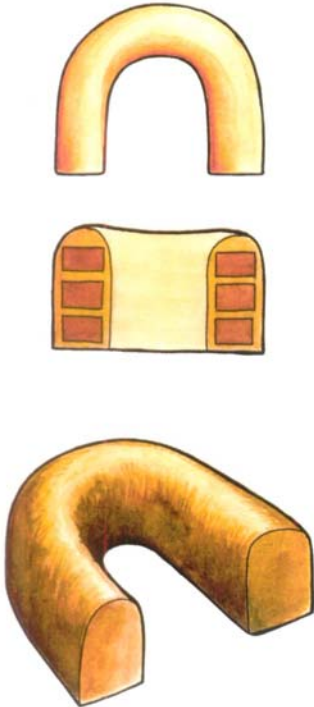
Name of the Stove:	Biomass stove for Ashmee Industry – a small scale household industry
Type:	Two Pot Stove
Chimney:	No
Materials:	Concrete slab, bricks, cement, sand, clay, etc.
Main fuel:	Fuel wood, coconut husk, etc.
Used in:	Villages in Sri Lanka
Dissemination:	Number not available
Developed by:	Not available
Estimated Cost:	Not available
Performance:	5kg Ashmee per day, 0.25 yards of fuel wood/day

Source:

Stove Compendium
ARECOP – RWEDP 2001
www.arecop.org

RE Practices in Sri Lanka – Community/Industrial Cook Stoves

Community/Cottage Industry Cook Stoves – SRI LANKA



Biomass Stove for *Murukku* Industry

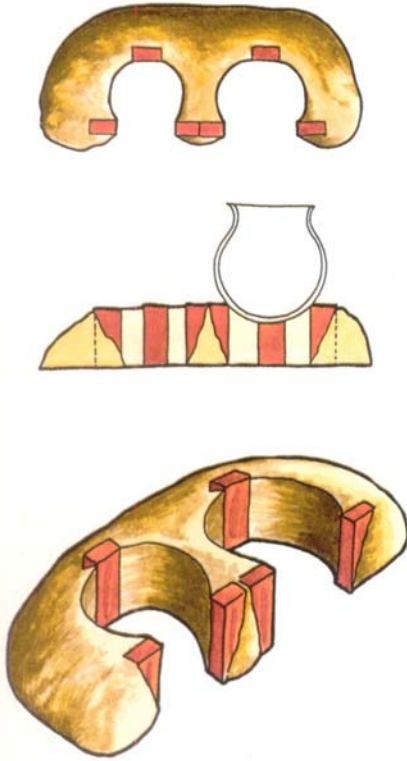
Name of the Stove:	Biomass Stove for Murukku Industry – a small scale household industry
Type:	Single Pot Stove
Size:	(1.75x1.5x1)ft
Chimney:	No
Materials:	Bricks, Clay, Cow dung, etc.
Main fuel:	Fuel wood
Used in:	Villages in Sri Lanka
Dissemination:	Number not available
Developed by:	Not available
Estimated Cost:	Very small
Performance:	Cook 20 kg of wheat flour/day, ~ 56 kg wood/day

Source:

Stove Compendium
ARECOP – RWEDP 2001
www.arecop.org

RE Practices in Sri Lanka – Community/Industrial Cook Stoves

Community/Cottage Industry Cook Stoves – SRI LANKA



Biomass Stove for *Palm Honey* Industry

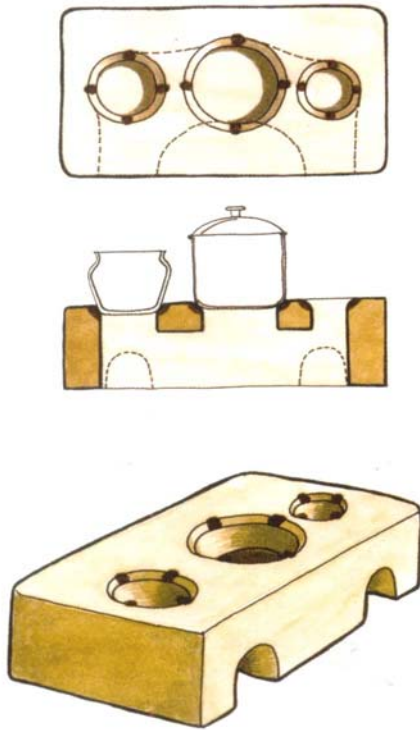
Name of the Stove:	Biomass Stove for Palm Honey Industry – a small scale household industry
Type:	Two Pot Stove
Chimney:	No
Materials:	Bricks, Clay, etc.
Main fuel:	Fuel wood, coconut husk, waste wood from timber mills
Used in:	Villages in Sri Lanka
Dissemination:	Number not available
Developed by:	Not available
Estimated Cost:	Very small
Performance:	~ 4 bottles of honey in 4 hours, ~ 0.2 yards of wood/day

Source:

Stove Compendium
ARECOP – RWEDP 2001
www.arecop.org

RE Practices in Sri Lanka – Community/Industrial Cook Stoves

Community/Cottage Industry Cook Stoves – SRI LANKA



Biomass Stove for *String Hopper* Industry

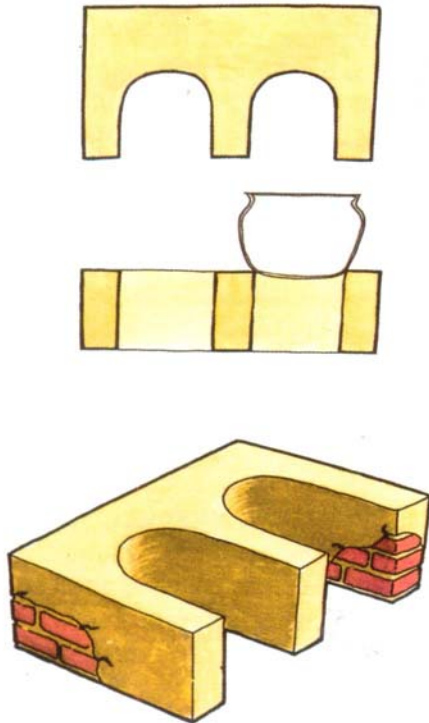
Name of the Stove:	Biomass Stove for String Hopper Industry – household industry
Type:	Three Pot Stove
Size:	(2.5x2x1)ft
Chimney:	No
Materials:	Concrete slab, Bricks, Clay, Sand, Cow dung, etc.
Main fuel:	Fuel wood
Used in:	Villages in Sri Lanka
Dissemination:	Number not available
Developed by:	Not available
Estimated Cost:	Can be high due to concrete slab
Performance:	~ 7kg flour per day, 50kg wood/day

Source:

Stove Compendium
ARECOP – RWEDP 2001
www.arecop.org

RE Practices in Sri Lanka – Community/Industrial Cook Stoves

Community/Cottage Industry Cook Stoves – SRI LANKA



Biomass Stove for *Yoghurt* Industry

Name of the Stove:	Biomass Stove for Yoghurt Industry – a small scale industry
Type:	Two Pot Stove
Size:	(3x2.5x1)ft
Chimney:	Yes
Materials:	Concrete slab, Stone, Bricks, Clay, etc.
Main fuel:	Fuel wood
Used in:	Villages in Sri Lanka
Dissemination:	Number not available
Developed by:	Not available
Estimated Cost:	~ Rs. 8,000
Performance:	~ 800 cups of yoghurt per 8 hr, 1/8 yard wood/8 hr

Source:

Stove Compendium
ARECOP – RWEDP 2001
www.arecop.org

RE Practices in Sri Lanka – Biomass Technologies

Biomass Fuelled Fruit/Vegetable Dehydrator by NERD Centre



Name of Dryer	: Saw dust operated vegetable/fruit dehydrater
Type	: Sawdust operated Force draft batch dryer
Construction	: Metal fabrication
Materials used in construction	: Sheet metal, Angle iron, wood, Electric Fan, PVC meshed wooden framed trays.
Chimney	: yes, Sawdust stoves (2 Nos)
Instrumentation	: Dial Thermometer
Electricity supply	: 230V, 50Hz
Developed by	: NERD Centre, Sri Lanka
Cost	: ~ Rs. 80,000
Technology transfer	: done
Dissemination	: ~ 200 units
Performance	: 20 kg (fresh) veg./fruit can be dried in 8 hrs with sawdust consumption of 30kg

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdccentre@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka – Biomass Technologies

Biomass Fuelled Bakery Oven by NERD Centre



Features:

- Sawdust or paddy husk can be used as fuel. Hence, cost of fuel is kept to a minimum.
- Operation is simple and safe.
- Bread can be baked in 30-40 min
- Portable.
- Occupies small space.
- Heat up time is comparatively less compared to traditional bakery.
- Clean and hygienic baking of bread is possible due to indirect heating, and flue gas does not come into contact with food.

Developed by : NERD Centre, Sri Lanka
Size : Available in three sizes – 64, 32, 16 loaves
Cost : ~ Rs. 80,000 (64 loaves)
Bakery products : Bread, Pastries, Buns, Cake, etc.

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdc@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka – Biomass Technologies

Efficient Biomass Combustion System for Tea Industry by NERD Centre



This new development addresses three main contributory factors for energy efficiency in hot air generator in tea industry and quality of made tea. Viz;

- High moisture in fuel wood
- Controlling excess air in combustion process
- Minimizing the fluctuation of hot air temperature required for tea drying.

Features:

- Converts log wood firing to chip wood firing in biomass energy systems
- Reduces moisture in biomass to a minimum.
- Automatically feeds the biomass depending on the hot air temperature.
- Minimizes the fluctuation of hot air temperature to a very close range.
- Reduces the fuel wood consumption by 45%
- Increases the overall efficiency up to 75%

This technology won the National Science & Technology Awards for 2008, in the category of “Contribution by Science and or Technology in Reducing Use of Energy”

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdcentre@nerdc.lk
Web: nerdc.lk

RE Practices in Sri Lanka – Biomass Technologies

Lanka Dry Batch Biogas System by NERD Centre



Features:

- Paddy straw is used as the main digestible matter
- Gives biogas which can be used for cooking and lighting
- The slurry left after digestion is a valuable soil conditioner/fertilizer.
- An environmentally friendly technology

Technical Information:

- Made out of bricks, cement, sand, etc.
- Batch operation.
- 3 Nos. 45 gal barrels are used as gas holders (floating)
- Once loaded the system will work for 4 to 5 months
- No maintenance during operation for nearly 5 months
- Available in different capacities depending on the need.
- 2 ton unit is sufficient for a small household.
- Sri Lankan standards have been prepared with the initiative of 'Practical Action' Sri Lanka, April 2006.

Source:

National Engineering Research and Development Centre of Sri Lanka
Ekala, Jaela, Sri Lanka
Tel./Fax. 94-1-2236434
Email: nerdc@nerdc.lk
Web: nerdc.lk

Cook Stoves Manufacturers in Sri Lanka

S No	Name & Address	Contact	Type of Stove
1	Mr. Riyad Ismail, 503/5, Halbarawatte, Thalahena, Malabe, Sri Lanka	Tel: 011 7913345	EZ TURBO STOVE
2	Spectra Industries Lanka (Pvt.) Ltd Kelimune, Maspotha Kurunegala	Mr. W.M. Wimalaweera 037 2236827 037 2236779	NERDC Wood Gas Stove and NERDC Rice cooker
3	Mr. L. Wimaladasa Sigera 254, Sigera Road Kotte	0777 723679 073 100759 011 5750978	NERDC Wood Gas Stove
4	Mr. K.G. Nishantha Pushpakumara 710, Udukawa Denipitiya	041 2251823	NERDC Wood Gas Stove
5			

Semi-Dry Process of Biogas Production Licensees

1. Mr. L.P. Prasanna Wimalaweera Tel. 0722 818546, 077 6131540
2/50/1, Gunasevanagama
Japalawatta
Minuwangoda
2. Mr. U.G. Chandana Wijesinghe Tel. 0776 206033, 0722 870976
6, Track
Angamuwa

**BIO MASS RICE COOKER
MANUFACTURING LICENSEES**

	Name & address	T.P. No.
1.	Mr. W. M. Wimalaweera Spectra Industries Lanka (Pvt) Ltd., Kelimune, Maspotha, Kurunegala.	037 - 2236779 037- 2236827
2.	Mr. K. G. A. Appuhamy Mr. K. G. Nishantha Pushpakumara Goodwin Industry No. 710, Udukawa, Denipitiya.	041-2251823
3.	Mr. G. V. K. Gallage "Vijitha", Gallegama, Ingiriya.	072-4565371 060-2449789
4.	Mr. W. P. Sunanda Himidiri No. 51/1, "Susiri", Pasal Mw., Rattanapitiya, Boralesgamuwa.	011 - 2516771
5.	Mr. R. A. Ujith Prabath No. 41, Mahalwarawa, Pannipitiya.	0777-481257
6.	Mrs. S. H. Liyanage ISTC Stoves Industries No. 159/K, Jayabima, Makewita, Ja-Ela.	011-5354302
7.	Mr. L. Wimaladasa Sigera Res. : No. 24, Niwasa 60, New Rd., Thisawewa, Anuradhapura.	0777-723679 0773-100759 011 5750978
8.	Mr. D. M. S. Bandara Dambewela No. 133/26, Bernadeth Mw., Rilaula, Kandana.	078-5787878 011-4590888
9.	Mr. B. U. Chandrasekara Lanka Engineering Services & Constructions (Pvt) Ltd. No. 323 E, Kaduwela Road, Battaramulla.	011 - 5627259 Fax : 5677553
10.	Mr. D. M. G. Sanath Chandra No. 60C, Wevaihala Mw., Jamburaliya, Madapatha.	011- 2703792
11.	Mr. M. I. G. Dabarera "Vilasini", Mohottimulla, Dankotuwa.	031- 5682765
12.	Dr. Priyantha Wijesooriya RESCO ENERGY PVT LTD. No. 30/6, 2 nd Lane, Koswatta, Nawala.	060-2152561 071-4710500
13.	Mr. Asela Indika Salwathura Managing Director Salwathura Engineering Enterprises (PVT) Ltd. No. 25, Colombo Road Boralesgamuwa.	011 2509005
14.	Mr. W. L. C. A. Wijesundara DEMCO Industries, No. 60, Kirindiwela Rd., Henegama (W.P.)	033 - 2255508
15.	Mr. Geeganage Tissa Kumara T.K. Engineering Products No. 81, Bandigoda, Ja-Ela	011-2244430 071-4413684
16.	Mr. K. A. Karunaratne Bandara No. 169, Kahagollawala, Dombemada, Rambukkana.	071-4416480 037-5624142, 077-3761009,
17.	Mr. G. H. Saman No. 06, Modarawila Road, Nalloruwa, Panadura.	038-2241372, 071-8143107