

PA. 11/11/83
11/11/83

WOOD CONSERVING COOK STOVES

BIBLIOGRAPHY

November 1983



1815 North Lynn Street, Suite 200
Arlington, Virginia 22209 USA

Entries in the Bibliography that are marked with a star (*) are available from VITA. See Order Blank at end of Bibliography for ordering information. Orders should include the code number printed to the right of each entry. Use of these numbers will speed and simplify the processing of requests. Other documents should be ordered directly from the source.

TABLE OF CONTENTS

Stove Designs..... 1

Stove Testing..... 6

Wood Burning Stoves..... 11

Lorena Stoves..... 14

Energy for Cooking..... 16

Fuels for Stoves..... 19

Fuel-less Stoves..... 21

Ovens..... 22

Stove Dissemination..... 25

Reports..... 27

Stove Designs

- *Adam, C., and M. Amin. "PDI Family Cooker." Karachi, Pakistan: Pakistan Design Institute, 1981 (16 pp.) V-C-3, P2
011712
Booklet designed for instructional purposes, outlines advantages of the family cooker and describes its installation and components. The stove is constructed from brick or mud and clay with metal chimney attachments.
- Axell, E., and C. Wallace. "Fuel Efficient Stoves for Rural Households." Soft Energy Notes, V. 2, No. 8, December 1979, pp. 77-102. V-C-2
010316
Article reviews several publications that give full design and construction details for energy efficient stoves.
- *Bowen, G.C. "Wire Fiber Reinforced Mortar Stoves." Journal of Ferrocement, V. 11, No. 2, April 1981, pp. 169-175. V-C-3, P2
011570
Dimensions, design and construction details are given for a prototype heating and cooking stove made using fiber reinforced concrete.
- Brace Research Institute. "Simple Fuel Burning Cooking Stove." Quebec, Canada: Brace Research Institute, 1977. (1 p.) V-C-4
010251
Blueprint and materials list for a cooking stove.
- CERER. "Construire sa propre cuisinière Ban Ak Suuf." Dakar, Senegal: Centre d'Etudes et de Recherches sur les Energies Renouvelables, 1982. (20 pp.)
- *"La Cocina Sin Humo: Ghana." Guatemala, Guatemala: CEMAT, 1978. V-C-3
(6 pp.) (Spa)
012574
Study describes a stove that can be constructed from a variety of materials readily available in developing countries. The basic design can be modified to meet the needs of a specific country outlines procedure for stove construction. (French version: V-C-3 (Fre) 012286).
- *Connors, Stephen. "Sota Stove Construction." Benin: Peace Corps. V-C-3, P2
(10 pp.) 023578
A step-by-step construction guide designed to enable the user to build a sota stove for any type of pot.
- *Connors, Stephen. "Stove Design Handbook." Benin: Peace Corps. (12 pp.)
- *"Construction of a Clean, Fuel Efficient Cooking Stove." Tarik. V-C-2,
n.d. (4 pp.) P1010319
Paper carefully outlines how to choose the best materials for stove construction, how to mix mortar, prepare a foundation and build up the stove. Suggestions are also given for firing up and maintaining the stove.

- *"Cooking Stove." Village Technology Handbook. Arlington, Virginia: VITA, Inc., 1970, p. 155. V-C-2
010317
Details are given for building a cooking stove from clay with the use of hand tools. The stove will burn wood, charcoal or cowdung, and apparently has been successfully tested in India.
- Cookstove Handbook. Tata Energy Research Institute, June 1982.
- *"Une cuisinière sans fumée-Ghana." Washington, D.C.: Experience, Inc., n.d. (6 pp.) (Spanish version: V-C-3 (Spa) 012574) V-C-3
(Fre)
012286
Outlines a method for the construction of a smokeless stove.
- *Daniel, S. "How to Make a Smokeless Stove." Rural Missions, n.d., p. 6. V-C-2, P1
010311
Briefly details process for making a stove from mud and brick.
- *Deer, R., and C. Nzabonimana. "Comment construire une cuisinière à bois à deux trous, pour l'économie du bois, en argile et sable." Butare, Rwanda: CEAER, Université National du Rwanda, March 1983. V-C-2
010235
- *"Economic Stove." Santa Isabella, Cali, Colombia: Comunidad de San Bavriel, n.d. (4 pp.)
Describes improvements made on a stove model popular in Brazil (cozinha caipira) and explains advantages of the improved model. Includes diagrams of the stove and its component parts.
- *"The Family Cooker." Washington, D.C.: League for International Food Education, 1980. (2 pp.) V-C-2
010310
Very brief description of a cooker designed by Eindhoven University with the aim of full utilization of potential heat energy of solid fuels.
- *"Fireless Cooker." Village Technology Handbook. Arlington, Virginia: VITA, Inc., 1970, p. 155. V-C-2
010292
Describes a fireless cooker that works by heat retention through use of insulation.
- *"A Fireless Cooker Can Save Fuel." Information Kit, V. 2, No. 3, January 1982. (3 pp.) V-C-2
010293
The pamphlet outlines materials needed and steps to be followed in the construction of a fireless cooker. Also details operational procedure.
- *"Fogon...Built of Adobe or Fire Bricks." ICE Almanac. May/June 1980, p. 4A. V-C-2
010283
Brief survey of the merits of the fogon--a brick stove introduced by the Peace Corps to improve kitchen hygiene in Paraguay.

- *"Fourneaux sans fumée: comment concevoir et fabriquer le vôtre." Environnement Africain, No. 7, supplément, August 1978. (8 pp.) V-C-1 (Fre) 010634
 Article illustrates five models of stoves that have been developed in various parts of the world. All tend to be inexpensive and can be constructed from local materials. These models are also smokeless.
- *"Improved 'Chulah' for Kitchen." New Delhi, India: National Buildings Organization, n.d. (2 pp.) V-C-6, P1010240
 Describes and diagrams how the common Indian 'chulah' can be made smokeless by improving the chimney design.
- Joseph, S., et.al. "Compendium of Tested Stove Designs." London: Intermediate Technology Development Group, October 1980. (57 pp.) V-C-2, P 010788
 Compendium of stove designs in which information has been provided on the following: its origin, field and laboratory tests and dissemination programs, general description and materials breakdown, construction method and level of skill required, and use and maintenance. Stoves have been classified according to the main material used in construction.
- Joseph, S. "Designing Low Cost Stoves." Intermediate Technology Development Group, n.d. (5 pp.)
- "The Kroupa Stove." Mother Earth News, No. 67, January/February 1981, p. 182. V-C-3, P 011501
 Briefly details the design features of the kroupa stove. The device is intended for both cooking and heating purposes.
- *LINK. "How to Make a Mud Stove." Marshalltown, South Africa: LINK, December 1980, No. 22, pp 5-10. V-C-2, P 010881
 Simple instructions are given for making a mud stove that can burn either wood or coal.
- *Loose, Jon. "The Portable Magan Chula--a closer look." Boiling Point, October 1982, No. 3, p. 15.
 Summary of a forthcoming paper.
- *Magan choola (smokeless cooking oven)." Madurai, India: Gandhiniketan Ashram, 1955. (29 pp.) V-C-6, P1010238
 The booklet gives an account of the construction, advantages, and utility of the Magan choola, an improvement over the traditional Indian stoves.

- *Micuta, W. "Modern Stoves for All." Geneva, Switzerland: Bel-
lerville Foundation, 1981. (60 pp.)
Booklet, addressed to skilled technicians, provides gen-
eral drawings and information to aid in stove building.
Author believes only skilled craftspeople can successfully
introduce efficient cooking stoves. V-C-2, P2
010788
- *"The New Nepali Chulo." Biogas Newsletter, No. 6, Autumn 1979,
pp. 1-3. V-C-6
002639
A cooking stove designed for smokeless fuel efficiency
is described. The design was developed in Nepal. A list of
four publications concerning woodstoves is given.
- "New Nepali Cooking Stoves that Make Smokeless Kitchens and Use
Less Firewood." Kathmandu, Nepal: UNICEF/NEPAL, P.O. Box
1187, September 1982
Provides information on the pre-fabricated household
stove currently being made available to rural families
through the Small Farm Family Programme which is being imple-
mented in various districts of the country by the Agricul-
tural Development Bank/Nepal with support from UNICEF.
- *Peters, G. "Construction of a Smokeless Fireplace." n.d. (7 pp.) V-C-2
010290
Captions accompanying pictures serve as instructions for
construction of stove suited for cooking. Article also in-
cludes recommendations for construction of the stand and
chimney as well as a diagram of the stove and fire duct.
- *Raju, S.P. "Smokeless Kitchens for the Millions." Madras, India:
The Christian Literature Society, 1953. (40 pp.) V-C-6
010237
Booklet presents the Hyderabad chula as the solution to
cooking and fuel problems confronted by the Indian woman.
Details on special features and construction of the stove are
given.
- *Rao, E.G.K. "Improving the Domestic Chula." Indian Farming,
1962. (3 pp.) V-C-6,
P1010239
The article explains design and uses of the typical
Indian chula and sums up the functional specifications for an
improved chula. Also suggests ways in which the improved
stove can be popularized.
- *Servicio Nacional de Planos. "Estufa de carbon (o lena)." Bogota,
Colombia: Instituto Colombiano Agropecuario, 1980. (8 pp.) V-C-2
(Spa)
010670
The brochure shows how to construct a charcoal or wood
burning stove by illustrating the step-by-step process.
- *"A Smokeless Chulah for Every Home." Home Science Series, No. 2,
1961. (7 pp.) V-C-6
010242
The booklet explains how to make a chulah and connect
the chimney.
- *South Pacific Commission. "Building the Smokeless Stove." Sydney,
Australia: South Pacific Commission, n.d. (4 pp.) V-C-2, P1
010313
Basic plans, diagrams, and instructions are given for
building a stove from concrete.

- *South Pacific Commission. "How to Build a Smokeless Stove." Sydney, Australia: South Pacific Commission, n.d. (8 pp.)
 Step-by-step instructions for building a concrete stove using a mold and chicken wire meshing are accompanied by diagrams of the mould. V-C-2
 010318
- *Stewart, B. "How to Make a Clay Stove." UNV-DDS Asia Pacific Newsletter, No. 8, 1981, pp. 14-18. V-C-3, P2
 012650
 Step-by-step instructions on how to construct a two-pot woodstove from clay.
- Taylor, A.D. "Camp Stoves and Fireplaces." Washington, D.C.: Government Printing Office, 1937. (89 pp.) V-C-2
 010315
 This discussion of stoves and fireplaces applies primarily to devices that have been adapted for use in camps and picnic areas. It contains, however, useful information on types of stoves, general design problems, design details, and construction materials.
- Trussell, J. "Designing Ceramic Stoves, Part I." Boiling Point, No. 1, January 1982, pp. 3-4. V-C-3, P1
 013066
 First in a series of articles introducing the subject of constructing stoves out of fired clay. Looks at where clay comes from and the two types of clay most commonly found. Includes glossary of common terms in clay technology.
- *VITA. "Cocinas Conservadoras de Lena." Arlington, Virginia: VITA, Inc., April 1980. (8 pp.) V-C-3
 (Spa)
 007363
 Describes four cookstoves being used successfully in the Third World: the Lorena stove, the Singer stove, the smokeless chula and a sawdust-burning cookstove. Briefly discusses a proposed project to produce a woodstove by a Peace Corps Volunteer in Upper Volta. Also in French.
- *VITA. "Cuisinières économiques." Arlington, Virginia: VITA, Inc., April 1980. (8 pp.) V-C-3
 (Fre)
 007363
 Describes four cookstoves being used successfully in the Third World: the Lorena stove, the Singer stove, the smokeless chula and a sawdust-burning cookstove. Briefly discusses a proposed project to produce a woodstove by a Peace Corps Volunteer in upper Volta. Also in Spanish.
- *VITA. "Simple Stove Design." Arlington, Virginia: VITA, Inc., n.d. (3 pp.) V-C-2
 010299
 Describes stove made from a tin drum.
- *Wood, T.S. Field Report B-3, "Ceramic Portable Stove." Arlington, Virginia: VITA, Inc., October 1981.

Stove Testing

- *Attwood, P.R. "Improving the Efficiency of Cooking Stoves with Special Reference to the Family Cooker." Eindhoven, The Netherlands: Appropriate Technology Group, 1980. (9 pp.) V-C-2
010309
Describes tests performed on the Family Cooker to determine its efficiency. Based on the tests, improvements were made to the cooker to cut its heat loss by half. The information presented can be used to improve other stoves.
- *Attwood, P.R. "Improving Solid-Fuel Cooking-Stoves with Special Reference to the Family Cooker." Eindhoven, The Netherlands: Appropriate Technology Group, 1980. (89 pp.) V-C-3, P3
013331
Presents results of an investigation for improving the effectiveness of solid-fuel cooking stoves, with the objective of making the family cooker as efficient as possible before putting it into production.
- *Baldwin, S., I. Ouédraogo, and G. Yameogo. "Lab Tests of Fired Clay Stove, the Economics of Improved Stoves, and Steady State Heat Loss from Massive Stoves." Arlington, Virginia: VITA/CILSS, October 1982. (48 pp.) V-C-2, P1
020609
This report is comprised of three separate sections: a description of ongoing lab testing of fired clay stoves and a discussion of test results to date; an analysis of the economics of improved stoves; and a calculation of the effect of wall thickness on heat loss from massive stoves.
- *Baldwin, S., G. Yameogo, and I. Ouédraogo. "Lab Tests of Fired Clay and Metal One-Pot Chimneyless Stoves." Arlington, Virginia: IVE/CILSS/VITA, February 1983. (37 pp.)
- Bialy, Jan. "The Formulation of a Standard Test Procedure for Firewood Stoves." London, United Kingdom, Intermediate Technology Development Group, June 1981. (40 pp.)
- Brunet, E. "Tests on Charcoal Stoves," (Draft). Bujumbura: UNICEF, 5 December 1982.
- *Chaplin, Richard. "Mechanical Testing of Stove Ceramics." Boiling Point, October 1982, No. 3, p. 3-5. XVIII-CA-
3 (Fre)
020226
- *"Les consommations de combustibles domestiques au Sénégal sur foyers traditionnels et sur foyers améliorés. G. Madon, L. Diop, and E. Lagandre. Dakar: Centre d'Etudes et de Recherches sur les Energies Renouvelables, Mars 1982. (40 pp.)
Report summarizes an investigation of 87 "Ban ak Suuf" stoves used in 19 villages and urban quarters carried out in Senegal, March - October 1981.
- *Downey, Jack. Stove Testing Manual. Arlington, Virginia: VITA, Inc., n.d.

- *Dutt, Gautam. "Field Evaluation of Wood Stoves (with special reference to West Africa.)" Arlington, Virginia: VITA, Inc., 1981. (27 pp.) V-C-3, P2
011556
Describes a stove testing methodology designed to overcome negative attitudes toward testing. Guidelines are given for conducting statistical tests.
- *Garberson, W. "Preliminary Testing of Wood Consumption in Four 'Smokeless Cooker' Models and the Traditional Three-stone Fire." Washington, D.C.: ACTION/Peace Corps, 1979. (7 pp.) XVIII-CA-
3, P1
009558
Gives results of tests done in Ouagadougou to evaluate on a preliminary level the fuel-efficiency of some of the models of brick, cement, or earthen cookers that have been built in Upper Volta.
- *Geller, H.S. "Cooking in the Ungra Area: Fuel Efficiency, Energy Losses, and Opportunities for Reducing Firewood Consumption." Bangalore, India: ASTRA, 1981. (38 pp.) XVIII-CA-
3, P3
023385
Describes cooking practices and efficiency. Energy losses during cooking are examined and directions are given for reducing fuel consumption.
- *Geller, H.S., and G.S. Dutt. "Measuring Cooking Fuel Economy During Fuelwood Surveys: A Report to the FAO." Washington, D.C.: American Council for an Energy Efficient Economy, 1981. (46 pp.) V-C-3,
P2012354
Outlines information that should be collected in a fuelwood survey and how measurements of efficiency are made, considering a number of variables.
- Geller, Howard, Bai Leteemane, Theresa A.M. Powers, James Sentle. "Prototype metal and Mud Wood-Burning Cook Stoves for Botswana." Burlington, Vermont: Associates in Rural Development, May 1983.
- *Gupta, C.L., and Usha K. Rao. "Experimental Studies on Firewood Cookstoves." Pondicherry, India: TATA Energy Research Institute, n.d. (9 pp.) V-C-3, P2
023572
Testing procedures for chullahs for the purpose of improving their efficiencies are described in this document.
- *Hantafaye, H., et al. "Tests comparatifs des foyers améliorés (2^e série)." Bamako: Laboratoire de l'Energie Solaire, March 1982. (10 pp.) V-C-2
(Fre)
026962
Second report in a series on the construction and testing of improved stoves in the USAID Renewable Energy Project in Mali.
- Hayden, A.C.S. "Efficiency of Wood-Fired Appliances." Ottawa, Canada: Canadian Centre for Mineral and Energy Technology, 1978 (26 pp.) V-C-3,
P1010281
The paper discusses four techniques used to measure efficiency of wood-fired appliances with special consideration of the Instantaneous Heat Loss Method.

- Joseph, S. "Stove Testing." London: Intermediate Technology Development Group, 1979. V-C-2, P1
008253
Data sheet designed as an aid in signing, testing, and modifying stoves as well as in collecting of data useful for instructional purposes.
- Joseph, S., et al. "Kenyan Standard for Boiling Water Tests for Charcoal Stove." London: Intermediate Technology Development Group, n.d. (22 pp.)
- Joseph, S. et al. "The Comparative Performance of Kenyan Charcoal Stoves." Stoves Project Technical Paper No. 1. London: Intermediate Technology Development Group, August 1982.
- Joseph, S., and Y. Shanahan. "Laboratory and Field Testing of Monolithic Mud Stoves." London: Intermediate Technology Development Group, 1981. (51 pp.) V-C-3
010721
Report examines design and construction of improved mud stoves, the results of testing carried out by ITDG, and the problems of introducing improved stoves and ways of overcoming these problems.
- Joseph, S., and Y. Shanahan. "Designing a test procedure for domestic woodburning stoves." London: Intermediate Technology Group, 1980. (23 pp.) V-C-3
010265
Report details information needed to provide initial assessment of the suitability of woodstove design and outlines laboratory and field tests required to see that a stove is suited to cultural practices and is better than stoves currently in use by people.
- Loose, J. "Testing the Tungku Lowon." Boiling Point, No. 1, January 1982, pp. 2-3. V-C-3, P2
013065
Reports on tests done on the Tungku Lowon stove, a design developed by Dian Desa that is similar, in many ways, to traditional stoves constructed of mud.
- *Openshaw, K. "A Comparison of Metal and Clay Charcoal Cooking Stoves." Morogoro, Tanzania: Division of Forestry, University of Dar es Salaam, 1979. (21 pp.) V-C-2
011032
The traditional African metal charcoal stoves is compared with a burnt clay stove common to Asia. Results on experiments undertaken to determine their efficiencies are reported. It was found that the clay stove is forty percent more efficient.
- **"Options for Cooking Stoves: An Evaluation of Thai Cooking Fuels and Stoves." RERIC News, V. 14, No. 3, pp. 8-11. V-C-6, P1
013017
Report documents investigations of the energy unit cost of sixteen cooking fuels and the tested performance efficiency of twenty-six different cooking stoves at a testing site at a refugee holding center.

- Prasad, K.K., ed. Some Studies on Open Fires, Shielded Fires and Heavy Stoves. Eindhoven, The Netherlands: Department of Applied Physics, Eindhoven University of Technology, 1981. (161 pp.) V-C-3, P3
012355
- Report in two parts: the first part concentrates on different classes of open fires and how to improve their fuel economy. The second part deals with two types of heavy stoves and their behavior under different operating conditions. A stove is described and suggestions for improved economy are made.
- Prasad, K.K., ed. "Some Performance Tests on Open Fires and the Family Cooker." Eindhoven, The Netherlands: Woodburning Stove Group, Eindhoven University of Technology, 1980. (25 pp.) V-C-3, P1
011609
- Report describes work and tests done on the efficiency of open fires and woodstoves. Data on the family cooker are presented toward investigating the problems and prospects of constructing heat balances in newer designs.
- Prasad, K.K., ed. A Study on the Performance of Two Metal Stoves. Eindhoven, The Netherlands: Eindhoven University of Technology, February 1981. (144 pp.) V-C-3, P2
010792
- The performance of two metal stoves, the Family Cooker and the De Lepeleire/Van Daele, is considered using the efficiency as obtained from conventional water boiling test as an indicator. Paper considers design and experimental details and discusses heat output and efficiency.
- *"Principles of Baffle Design." Cookstove News, V. 1, No. 3, November 1981, pp. 8-9. V-C-3, P2
012651
- Lists findings, with illustrations, of four different stoves tested at Aprovecho. Briefly discusses two principles to increase fuel savings and improve heat transfer.
- *Satoriya, K.A. "Fuel Conservation in Domestic Combustion." Ludhiana India: College of Agricultural Engineering, Punjab Agricultural University, 1978. (7 pp.) V-C-6, P1
011607
- Paper presents technique for saving fuel from domestic combustion using newly designed chulas. The exact design of this varies with the type of fuel to be burned.
- Shanahan, Y. "Testing of a Two-holed Indonesian mud stove." London: ITDG, January 1982 V-C-2, P1
023574
- Report from the Workshop on Stove Projects 6-11 April 1981, Panwila, Sri Lanka.
- *Testing the Efficiency of Wood-Burning Cookstoves: Provisional International Standards. Arlington, Virginia: VITA, Inc., March 1983. (76 pp.)
- Proceedings of a meeting at VITA in December 1982. Also available in French and Spanish.

- *Tschinkel, J.G. and H. Tschinkel. "Contribution à la protection des combustibles ligneux: performance et économie de quatre types de réchauds." Note de Recherche, No. 4, 1975. (20 pp.)
 Four types of single-pot cooking burners were tested in an attempt to find a suitable alternative in areas where wood is becoming scarce. Types tested included pressure fed and wick fed kerosene burners and a propane gas burner. V-C-4
 (Fre)
 010624
- *Wood, T.S. Field Report B-2, "More Stove Tests" and "Metal Stove vs. 3 Stones." Arlington, Virginia: VITA, Inc., September 1981.
- *Wood, T.S. Field Report B-4, October 24, 1981," Woodstove Testing: Evaluation of Local Materials." Arlington, Virginia: VITA, Inc., 1981. (6 pp.)
 Report focuses on the progress made by Wood in developing suitable methods to evaluate local stove-building materials. V-C-3, P3
 013423
- *Wood, T.S. "The Hazards of Testing Improved Wood-Burning Stoves." BOSTID Developments, Vol. 1, No. 4, December 1981, pp. 4-6.
 Briefly describes activities at a pilot woodstove testing center in Upper Volta. Simple reliable testing methods were emphasized to identify stove designs most appropriate for use in West Africa. V-C-3, P2
 012941
- *Wood, T.S. "Laboratory and Field Testing of Improved Woodstoves in Upper Volta." Arlington, Virginia: VITA, Inc., 1981. (23 pp.)
 Report describes testing activities at a pilot woodstoves testing center in Ouagadougou, Upper Volta. The emphasis has been on developing simple and reliable testing methods using rugged and inexpensive equipment. V-C-3. P2
 011713

Wood Burning Stoves

- Allen, J.C. "Woodburning Cookstove." Countryside, V. 62, No. 2, February 1978, pp. 34-35. V-C-3
010279
Some tips on how to start a fire, test the temperature, bake and cook on a woodstove.
- Barden, A. "The Masonry Stove: Hot and Heavy." Organic Gardening, V. 26, No. 11, November 1979, pp. 138-141. V-C-2
010286
Author suggests that the brick wood burning heater which can also double as an oven or be used for storage, be more seriously considered by home owners in the United States.
- Brand, S. "Scandinavian Wood Stoves." Coevolution Quarterly, No. 7, Fall 1975, pp. 80-81. V-C-3
002636
The article describes the features of Scandinavian woodstoves. Different models are illustrated with their price.
- *Cap-Impe, A.M., D. German, and G. Madon. "Les Cuisinières 'Ban Ak Suuf'." Dakar, Senegal: Centre d'Etudes sur les Energies Renouvelables, 1980. (27 pp.) V-C-3
(Fre)
007695
Prepared to explain the Ban Ak Suuf program to rural development workers. Gives illustrated directions for making a Ban Ak Suuf stove which is a woodstove made of clay and sand. Gives suggestions for woodstove demonstrations and training in their construction.
- *Comunidad de San Gabriel. "Cocina Economica." Barrio Santa Isabel, Cali, Columbia: Comunidad de San Gabriel, 1979. (4 pp.) V-C-3
(Spa)
010669
Diagrams for a wood burning cooking stove and its components are accompanied by brief paper detailing the advantages of the stove.
- *La cuisinière économique." Le Développement Voltaïque, No. 60-61, January/February 1979, pp. 26-35. V-B-4
(Fre)
001015
The article gives a design developed by Professor de Lepeleire and Mme. Ki-Zerbo, for a stove that uses three times less wood than usual designs. The deforestation problem in Upper Volta is also discussed.
- Dordahl, B. "Wood-Burner Restoration." Mother Earth News, No. 59, September/October 1979, pp. 25-26. V-C-3
010268
Article gives some pointers on how to tell whether an old wood cookstove is salvageable and how to restore a stove.
- *Dyer, D.F., et. al. "Improving the Efficiency, Safety, and Utility of Wood Burning Units." Auburn, Alabama: Department of Mechanical Engineering, 1977. (75 pp.) V-C-3,
P1010278
Technical discussion of studies conducted on various types of stoves.

- *"Guia para la Construccion, Uso y Mantenimiento de Estufas Domes-
ticas de Leña." Guatemala: ICAITI, 1981. (94 pp.) V-C-3
Guide details the construction, use, and maintenance of (Spa)
wood stoves made from various materials. A number of stove 012284
types are discussed.
- *Karskey, T.J. "Wood Stove Installation and Safety." Energy Facts, V-C-3
January 1980. (4 pp.) 010273
The pamphlet suggests ways in which to protect walls and
floors from sparks or heat radiated from a wood burning
stove. Suggestions are also made for safe installation of the
stove pipe.
- Kristia Associates Importers. "A Resource Book on the Art of Heat- V-C-3
ing with Wood." Portland, Maine: Kristia Associates Importers, 010267
1976. (45 pp.)
The booklet essentially discusses the merits of the Nor-
wegian Jotul stove, but also covers such topics as woodstove
installation, components of stoves, fireplaces, and fuels.
- *Levin, A. "Heating Stove Plans." Arlington, Virginia: VITA, Inc. V-C-2
1964. (2 pp.) 010291
Plans for a small woodburning stove made from a barrel.
- Mother's Compact Cookstove/Heater." Mother Earth News, No. 72, V-C-3, P1
November/December 1981, pp. 166-168. 012169
For as little as \$50, a multipurpose woodburning appli-
ance can be built from the scraps of three water heater
tanks.
- *NAS/VITA. "Stove Design for Efficient Wood Burning." Development V-C-3, P1
Digest, July 1981, pp. 82-90. 01336
Article discusses and illustrates some of the more pro-
mising improved woodstove designs.
- *Réunion technique: foyers améliorés pour la cuisine à bois, notes V-C-3
sommaires." Ouagadougou, Upper Volta: CILSS, 1980. (11 pp.) (Fre)
The summary contains outlines of conclusions drawn by 010631
Prof. de Lepeleire from his research on a prototype woodstove
and Mme. Ki-Zerbo on the utilization of improved stoves. Her
outline compares merits and disadvantages of solar cookers as
well as the pros and cons of more conventional types of
stoves.
- *Saubolle, B.R. "A wood-burning stove." Arlington, Virginia: VITA, V-C-3
Inc., 1977. (1 p.) 010269
Describes how a woodstove can be fabricated from a 5
gallon paint drum.

- *Swiss Center for Appropriate Technology. "Cooking with Wood." St. Gallen, Switzerland: Swiss Center for Appropriate Technology, 1980 (23 pp.) V-C-3
010285
The document shows pictures of an exhibition held in Geneva in 1980 dealing with wood for survival. Pictured are various kinds of wood stoves constructed from many types of materials.
- Sylla, D. "Advanced Wood Burning." Coevolution Quarterly, No. 7, Fall 1975, pp. 82-85. V-C-3
002637
The article gives some advice on how to use wood and a stove effectively. Other advice includes mounting the stove, stovepipes, use of stoves and cookstoves, fireplace. Information about gathering wood and the type of saw to use is also discussed.
- *VITA. "General Design of Wood-Burning Stoves." Arlington, Virginia: VITA, Inc., n.d. (3 pp.) V-C-3
(Fre)
007362
Paper explains principles that underline the design of several types of stoves and component parts.
- *VITA. "Wood Conserving Cook Stoves: A Design Guide." Arlington, Virginia: VITA, Inc., 1980. (111 pp.) V-C-3
010209
Promotes cook stoves that are inexpensive to build, culturally acceptable, and environmentally sound. Chapters present information on how stoves work, how wood burns, choosing wood, improving combustion efficiency, plus detailed instructions on building four different types of woodstoves.
- *VITA. "Wood Stove." Arlington, Virginia: VITA, Inc., 1963. (2 pp.) V-C-3
010263
Diagram is given for a woodstove constructed from an oil barrel.
- *VITA. "Woodstove Packet." Arlington, Virginia: VITA, Inc., n.d. (80 pp.) V-C-3
010264
Compilation of articles on wood stove design and construction. Most articles are complete with fabrication instructions and diagrams.

Lorena Stoves

- *Choqui Experimental Station. "Preliminary Progress Report of the Lorena Stove Program." Quezaltenango, Guatemala: Choqui Experimental Station, 1979. (11 pp.) V-C-5
010719
This preliminary progress report from Choqui was based on 18 months of promotional activity for the stove. Discusses field studies conducted and courses offered to instruct people on the construction and use of the Lorena stove.
- *CEMAT. "The Lorena Stove, New and Better (El Poyo de Lorena: Es Nuevo y Tiene Ventajas)." Guatemala, CA: CEMAT. (12 pp.) V-C-5
010232
Original Spanish instructions for Lorena stove construction have been translated into English. Illustrations and diagrams accompany the text.
- *Estacion Experimental ICADA-Choqui. "Como Hacer su Estufa de Lorena." Quezaltenango, Guatemala, CA, 1980. (27 pp.) V-C-5
(Spa)01066
8
Brochure explains how to make a Lorena stove. It lists necessary equipment and materials and gives instruction for actual construction of the stove. One of a series.
- *Estacion Experimental ICADA-Choqui. "Como Usar su Estufa de Lorena." Quetzaltenango, Guatemala, CA, 1980. (15 pp.) V-C-5
(Spa)01066
8
Brochure provides simple explanations of drying wood, lighting a fire, cooking and other Lorena stove uses. Also tells how to clean the stove. One of a series.
- *Estacion Experimental ICADA-Choqui. "Para Que Sirve una Estufa de Lorena." Quetzaltenango, Guatemala, CA, 1980. (15 pp.) V-C-5
(Spa)01066
8
Brochure illustrates the advantages of a Lorena stove in protecting the environment, conserving wood, making cooking convenient and safe. One of a series.
- *Estacion Experimental Choqui. "The Lorena Cookstove." Quezaltenango, Guatemala, n.d. (14 pp.) V-C-5
010231
The booklet is an explanation of how to construct a stove from soil and sand. Also relates how the stove should be used.
- *Estacion Experimental Choqui. "El Poyo de Lorena." Tlaloc, Mexico: Promocion el Desarrollo Popular A.C., 1980. (19 pp.) V-C-5
(Spa)
010666
The booklet illustrates and explains simply the Lorena stove and how it is constructed.
- Evans, I., and M. Boutette. Lorena Stove--A Manual for designing, building and testing low-cost wood-conserving cookstoves. Editors, K. Keller and K. Darrow. Stanford, California: Volunteers in Asia, 1981. (144 pp.)

- *Evans, I., and D. Wharton. "The Lorena Mudstove: A Wood-Conserving Cookstove" Appropriate Technology, V. 4, No. 2, August 1977, pp. 8-10. V-C-5
010234
Article discusses merits of the Lorena stove, how this stove was introduced into Guatemala, and how it has worked to overcome some of the problems typically associated with cooking.
- Kline, Keith. "Lorena and Improved Cookstoves in Ecuador: An Evaluation." Peace Corps/Ecuador, October 1983.
- *"Le fourneau en terre modèle Lorena (Earthen Cookstove: Lorena Model)." Guatemala: CEMAT, 1980. (2 pp.) V-C-5
(Fre)
010623
A short pamphlet on the history, use, and working principles of the Lorena stove. Also contains brief explanation of the construction process accompanied by simple illustrations.
- "The Low-cost Owner-built Stove." Earthman, V. 1, No. 1, December 1979, p. 14. V-C-2, P1
011034
Simple instructions are given for constructing the Filipino version of the Lorena stove. This version, referred to as BED, can be fueled by anything from wood to rice husk and is simple to construct.
- *Royer, R.A. "Experimentation with Lorena-Banco Stoves: Church World Service, Niger." République du Niger: Church World Service, 1980. (4 pp.) V-C-5
010230
The paper summarizes work done by the Church World Service on Lorena stoves, including techniques tried, adaptations made, and current efforts to overcome design problems.
- *Shaller, D.V. "A Sociocultural Assessment of the Lorena Stove and its Diffusion in Highland Guatemala." St. Louis, Missouri: Center for Technology Assessment, 1979. (20 pp.) II-A-5.3
010543
Study evaluates diffusion and acceptance of the Lorena stove, and suggests ways to adapt the device to make it better suited to Guatemalan conditions.
- *Tay, M., and P. Cortez, eds. "Memorial del Segundo Encuentro Nacional de Tecnología Apropriada: Estufas de Lorena." Quezaltenango, Guatemala: Estacion Experimental ICADA-Choqui, February 1980. (45 pp.) V-C-5
(Spa)
010672
Included in the document are articles relating to the diffusion of the Lorena stove in Guatemala, its advantages and disadvantages, its significance in the local economy, its acceptance, and problems relating to its construction.

Energy for Cooking

- *Bertrand, A. "Consumption and Utilization of Firewood in Western and Central Africa (Consommation et utilisation des combustibles ligneux en Afrique...)." Nogent-sur-Marne, France: Centre Technique Forestier Tropical, 1979. (103 pp.)
Reviews current information on consumption and use of forest products in Western and Central Africa. Report also analyzes and presents factors to consider when collecting information about firewood and charcoal consumption. NAS/2-702
- *Brokensha, D., and B. Riley. "Forest Foraging, Fences and Fuel in a Marginal Area of Kenya." Santa Barbara, California: Social Progress Research Institute, 1978. (28 pp.)
Report examines use of firewood and charcoal in the Mberere Division, Embu District of Kenya. Traditional usage patterns are examined and perceptions of the role of firewood in society are given. NAS/2-004
- *De Lepeleire, G. "A short reflexion of woodburning cooking stove performance, efficiencies and fuel saving." Eindhoven: K.U. Leuven University, November 1982. (10 pp.)
Some of the criteria used to evaluate woodburning cook-stoves are described in this article. V-C-3. P2
023573
- *Dutt, G.S. "Reducing Cooking Energy Use in Rural India." Princeton, New Jersey: Center for Environmental Studies, 1978. (30 pp.)
Report identifies the methodology and direction of the research effort required to improve the efficiency of village cooking stoves in India while making them more affordable and easily producible at the local level. V-C-4, P1
010258
- *Ernst, E. "Fuel Consumption Among Rural Families in Upper Volta, West Africa." Washington, D.C.: ACTION, 1977. (23 pp.)
Study provides a measure of fuel consumption of rural families, and an analysis of types and amounts of wood consumed. Appendices discuss various species of wood used as well as the manner of wood collection. NAS/2-019
- *French, D. "Renewable Energy for Africa: Needs, Opportunities, Issues." Washington, D.C.: United States Agency for International Development, 1978. (45 pp.)
The paper discusses the energy needs of Africa and makes suggestions for future energy policy on that continent. The problem of firewood is discussed. Renewable energy sources such as woodstoves, charcoal, solar energy are presented. Determining the feasibility of a project as well as designing an energy project are treated. XVIII-A-1
P4
005056

- *Goldemberg, J., and R.I. Brown. "Cooking Stoves: The State of the Art," 1978. (19 pp.)
 Discusses general characteristics of wood consumption in rural and urban areas. Compares the energy needs for cooking in developed and less developed countries. Discusses efficiency of various methods of cooking and methods for improving the efficiency of wood cooking stoves. V-C-2, P1
 010320
- ICAITI. "Lena y Fuentes Alternas de Energía: Estudio Sobre Leyes y Políticas En América Central." Guatemala: Instituto Centroamericano de Investigación y Tecnología Industrial, 1983.
- *Janczak, J. "Compendium of Simple Technologies for Agglomerating and/or Densifying Wood, Crop and Animal Residues." Rome: FAO, 1980. (43 pp.)
 Paper describes simple technologies for densification of wood, crop and animal residues as well as household waste. For each technology, some indications are given of its degree of applicability to developing countries. Discusses the type of raw material used, scale of operation, final product and its energy characteristics. XVIII-C-1
 010706
- *Ki-Zerbo, J. "Women and the Energy Crisis in the Sahel." Unasy-va, Vol 33, No. 133, 1981, pp. 5-10.
 Article taken from a paper given at a Seminar on Fuel and Energy Development for African Women in Rural areas, Dec. 1980, Bamako.
- *Meier, Ueli. "Fuel Efficient Cooking Stoves." ENDA Third World New and Renewable Energies, No. 20-81, September 1981, pp. 38-52.
 A discussion of how various types of cooking stoves can be improved to make efficient use of cooking fuels. V-C-2, P1
 020592
- *Micuta, W. "The Optimum Use of Firewood Substitutes." International Council of Voluntary Agency News, No. 85, April 1980. (8 pp.)
 Brief look at the firewood shortage, means of solving the problem, and woodstoves designed by the Bellerive Foundation. V-C-2
 010289
- Morgan, R.P., and L.T. Icerman, et al. "Appropriate Technology for Renewable Resource Utilization. St. Louis, Missouri: Washington University, 1979. (300 pp.)
 A study has been performed of renewable energy sources for developing countries in conjunction with U.S. preparations for the UNCSTD conference. Five topical areas were examined in detail: wind energy, cookstoves, solar drying, rice bran processing and fiber agricultural and timber wastes. Initiatives which the U.S. could support are suggested and a variety of organizations that are involved in the above areas are identified. XVIII-A-4
 005889

- National Academy of Sciences. Firewood Crops: Shrub and Tree Species for Energy Production. Washington, D.C.: National Academy of Sciences, 1980. (237 pp.) XVIII-CA-3
007018
Report examines a partial solution to the worldwide fuel wood shortage, the selection and cultivation of firewood crops in developing countries. Primary emphasis was placed on species suited to family needs.
- *Openshaw, K. "Energy Requirements for Household Cooking in Africa with Existing and Improved Cooking Stoves." Morogoro, Tanzania: University of Dar Es Salaam, 1980. (10 pp.) V-C-2
008252
Traditional African cooking stoves are described together with two alternative stoves that have proved to be twice as efficient. Author also surveys present world supply and demand patterns for wood and hypothesizes future trends.
- *Openshaw, K. "The Gambia: A Wood Consumption Survey and Timber Trend Study: 1973-2000." Midlothian, England: International Forest Science Consultancy, 1973. (101 pp.) NAS/2-009
Describes a development study undertaken to obtain an estimate of annual per capita firewood and charcoal consumption taking into account socio-cultural variations. A second part of the report describes a methodology for forecasting wood consumption 1985-2000.
- *Openshaw, K. "Woodfuel Surveys: Measurement Problems and Solutions to these Problems." Morogoro, Tanzania: Division of Forestry, 1980. (25 pp.) XVIII-CA-3, P2
007633
Discusses the measurement problems in surveys when trying to estimate the consumption of woodfuel. Some steps for solving these problems are outlined.
- *Siddhartha, Bhatt M. "The Efficiencies of Firewood Devices, Part I (Open fires, Chuihs and Heaters)." Bangalore, India: Central Power Research Institute, n.d. (23 pp.)
- *Situation énergétique de la Haute-Volta. "Energies Nouvelles et Développement. No. 2-80, août 1980, pp. 4-13." XVIII-A-1
P5, (Fre)
010811
Presents data on population, energy consumption by type of fuel with particular attention to wood and charcoal consumption, and energy costs in Upper Volta, all in light of the global energy situation.
- Zhu, Hang. "Household Energy Consumption in the People's Republic of China." Master of Arts Thesis. St. Louis, Missouri: Washington University, August 1982.
Includes a chapter on energy consumption and stove designs for cooking in rural areas.

Fuels for Stoves

Bassey, Michael. "Sawdust Burning Cooker."

*Burton, R.E. "Sawdust Burning Oven." Arlington, Virginia: VITA, Inc., 1974. (1 p.) V-C-4, Pl
010225

Includes a diagram and brief description of a sawdust burning oven.

*"Charcoal Oven." Material from V.C. Pettit, ICA-AID. (2 pp.) V-C-1
004923

Brief article explains method for constructing a charcoal oven that is effective for baking and roasting. It can be made from two 5-gallon cans using hand tools.

Chanco, M.P. "The Rice Husk Stove." Appropriate Technology, V. 5, No. 3, November 1978, pp. 18-19. V-C-4
008251

Article reports on the rediscovery of the 'ipa' rice husk stove in the Philippines. Discusses how the stove can be built without specific detail.

De Silva, D. "A Charcoal Stove from Sri Lanka." Appropriate Technology. V. 7, No. 4, March 1981, pp. 22-24. V-C-4, Pl
011464

Describes a stove designed to utilize charcoal generated by the Maheveli Development Scheme. The stove, consisting of a clay cylinder that rests on a clay pan, fits the basic requirements in terms of cost, simplicity efficiency, and ease of operation.

*"Estufa a Asserin tipo 'CIDERE'." Concepcion, Chile: CIDERE, 1975. (8 pp.) V-C-4
(Spa)
010710

Gives materials list and several diagrams to aid in the construction of a sawdust-burning stove. No instructions are given.

*"Home-made charcoal burner." Ithaca, New York: Cornell University, n.d. (1 p.) V-C-2
010288

List of materials for an outdoor charcoal burner-grill.

*Huntington, D.A. "Sawdust Burning Space-Heater Stove." Marblemount, Washington: MEASTATIS, 1975. (8 pp.) V-C-4
010249

Drawings and assembly instructions are given for a sawdust burning stove and space heater. A 55-gallon drum is used in the fabrication of the device.

*"The Hwogwo." Bio-gas Newsletter, No. 9, Summer 1980. (6 pp.) V-C-2
010296

Brief description of the hwogwo, a Chinese cooking stove styled so the 'pot' itself surrounds the fuel source.

- *Ishengoma, R.C. "Domestic Cooking with Charcoal in Morogoro Tow, Tanzania." April 1982. (17 pp.)
 XVIII-CA-5
 P3
 017389
 A paper which gives results of a survey of charcoal use for cooking in a Tanzanian town. A drawing of the typical charcoal stove is give
- McGeorge, J. "Waste Oil Stove." Alternative Sources of Energy. August 1977, pp. 14-17.
 V-C-4
 010261
 The article surveys different devices that can burn the waste oil obtained from a local gas station.
- *Richolson, J. "Charcoal: An Old Fuel Which Can Meet New Needs." South Pacific Bulletin, V. 30, No. 1, p. 11-14.
 XVIII-CA-5
 , P3
 007000
 Describes a small program undertaken by the Fiji Department of Forestry to develop procedures for producing charcoal from wood and a cheap charcoal stove to demonstrate the practicality of charcoal as a domestic cooking fuel.
- Simon, E., and P. Solis. "Economic Stove that Burns Sawdust as Fuel." Appropriate Technology, V. 4, No. 1, 1977, pp. 23-24.
 V-C-4
 010250
 The article relates manufacturing and operating procedures for a simple stove that can be constructed locally with hand tools.
- *Wartluft, J.L. "Double-Drum Sawdust Stove." Upper Darby, Pennsylvania: Northeastern Forest Experiment Station, 1974. (4 pp.)
 V-C-4
 010259
 An inexpensive home-made stove for burning loose sawdust is described. It can be fabricated from one 55-gallon and one 30-gallon drum. Plans available from VITA.
- *"Wickless Kerosene Stove for Domestic Use." ASTRA Seminar, 1978. (10 pp.)
 V-C-4
 010255
 Paper surveys the types of kerosene stoves marketed in India and makes suggestions to improve efficiency and lessen risks and problems associated with their use.
- *VITA. "Briquetting: Agricultural Waste, Wood Waste, Charcoal." Arlington, Virginia: VITA.

Fuel-less stoves

- *Aprovecho Institute. "The Haybox Cooker." Eugene, Oregon: The Aprovecho Institute, n.d. (1 p.) V-C-1
010247
Explains steps for constructing a box lined with aluminum foil which will preserve the heat in a pot holding food that has been brought to a boil.
- Arnold, B.M. "Rediscover the Haybox Cooker." Mother Earth News. January/February, 1980, pp. 196-197. V-C-1
010256
Article makes general comments on the haybox method of preparing food and suggests some things that can be cooked well using this type of arrangement.
- Bambrick, F., and B. Hurley. "The Hay Box: The Energy Saving Cooker." Dublin, Ireland: Low Energy Systems, n.d. (20 pp.) V-C-1
010257
The booklet explains how food is cooked in a haybox and how the device is constructed. Also describes several ways in which the haybox is utilized.
- "Haybox Cookery." Powys, United Kingdom: Center for Alternative Technology, 1977 (2 pp.) V-C-1
010294
Brief explanation of haybox principles and design.
- *"Marmite norvégienne." Installations rustiques. n.d., pp. 115-118. V-C-1
(Fre)
010637
Describes a fireless cooking pot and gives instructions for fabrication. The pot works by retaining heat, thus allowing food to cook.
- *The Multiplier. "Hay Box Fireless Cooker." 1961. (1 p.) V-C-1
010260
Details how to construct the haybox, a device that allows food to cook with its own heat, once brought to a boil.

Ovens

- *AID "Four d'Extérieur." Village Technology Handbook. Arlington, Virginia: VITA, Inc., 1970, pp. 375-376. V-C
(Fre)
010636
Simple presentation outlines how an oven for baking bread, potatoes, etc., can be constructed from adobe or brick.
- *Bacon, R.M. "The Forgotten Art of Building and Using a Brick Bake Oven." n.d. (61 pp.) V-C-1
010226
A practical guide for those who wish to renovate or use a brick oven. Explains the evolution of the brick oven, and describes in detail its construction, including tools required, procedures to be followed, and types of materials to be used. Also covered is how to heat and use the oven.
- *Comunidad de San Gabriel. "Horno a Leña." Santa Isabella, Cali, Colombia: Comunidad de San Gabriel, 1980. (3 pp.) V-C-1
(Spa)
010671
Briefly describes modifications that have been made in an oven typical of those found in Latin America, and the advantages of such modifications. Diagrams included.
- "Construction d'un four à pain villageois." Somerset, United Kingdom: Rural Communications, 1978. (4 pp.) V-C-1
(Fre)
010633
Pamphlet lists steps in the construction of a brick oven. It is suggested that such an oven will alleviate the necessity of transporting bread over long distances, therefore reducing the cost of bread.
- *"A Drum Oven." Boroko, Papua New Guinea: South Pacific Appropriate Technology Foundation, 1979. (20 pp.) V-C-1
010219
Simple, step-by-step instructions are given for construction of an oven from two oil drums. The booklet also provides complete illustrations for each step.
- *Fargas, D. "Fours à pain, fours à bois." Rivesaltes, France: Daniel Fargas, n.d. (1 p.) V-C-1
(Fre)
010635
Simple discussion of various types of ovens: two are constructed from brick, one is of clay and earth, and the fourth was constructed from scrap metal.
- "Four à pain traditionnel amélioré (Ghana)." London: Intermediate Technology Publications Ltd., 1980. (4 pp.) V-C-3
(Fre)
010629
Briefly explains how to construct a dome-shaped bread oven from brick. It is finished with a coat of clay. The oven was designed by the students in the nutrition department at the University of Ghana.

- *"Four au feu de bois." Bulletin Technique, February 11, 1980. (4 pp.)
 Describes the construction process of a bakery oven made from brick. It was designed and constructed by Reverand Bertrand Saubolle for use by the Godavari School in Kathmandu, Nepal. V-C-3 (Fre) 010628
- Goode, P.M. "Village Technology for African Women." Appropriate Technology, V. 2, No. 3, November 1975, pp. 16-17. V-C-1 001063
 A brief description of the construction method for an oven made from a tin container or 'ddebe'.
- "A Large Wood Burning Oven." Cloudburst 2. Seattle: Washington Cloudburst Press, 1976, pp. 46-47. V-C-5 (Fre) 010623
 The article discusses dimensions of a brick oven that is used for baking bread. Operating instructions are given.
- "Mothers Backpack Oven." Mother Earth News, July/August 1980. (160 pp.) V-C-1 010222
 Mother Earth has constructed a camping oven from a lard bucket.
- *"An Outdoor Oven." Home Making Around the World. Norfolk: AID, n.d., pp. 338-339. V-C-1 004614
 An easy-to-build outdoor oven is described and illustrated. The oven is made from adobe brick and plastered with clay or cement.
- *"Oven Drum." Arlington, Virginia: VITA, Inc., n.d. (5 pp.) V-C-1 010218
 The booklet serves to instruct people interested in making an oven from two oil drums. The design was originally developed for the purpose of village manufacture.
- *"Oven Made from a Kerosene Tin." Information Kit, V. 2, No. 3, January 1962. (2 pp.) V-C-1 010216
 Short discussion on how an oven can be fabricated from a four gallon kerosene tin,
- *Pettit, V.C. "Four à charbon de bois (Charcoal Oven)." Village Technology Handbook, n.d. (4 pp.) V-C-4 (Fre) 010625
 Illustrated is how a charcoal oven can be constructed from two old oil tins of 20 and 25 liter capacity. Also given is a materials list and a short description.
- *Rowlands, J.J. "Outdoor Bake Oven." Cache Lake Country: Life in the North Woods, n.d. (2 pp.) V-C-1 010287
 Brief description of the French Canadian outdoor oven made from clay and stove or logs.

- Rural Communication Service. "The Village Bakery." Somerset, England: Rural Communication Services. (4 pp.) V-C-1
010220
The article describes how to construct the oven for a small village bakery. The design is based on a pattern used successfully throughout the world.
- *Taylor, R. "Bread Making Oven." Arlington, Virginia: VITA, Inc., n.d. (2 pp.) V-C-1
010221
Simple instructions and diagrams for constructing an oven from oil drums. Includes materials list.
- *VITA. "Wood-burning Oven." Arlington, Virginia: VITA, Inc., n.d. (3 pp.) V-C-1
000938
Details and diagrams a wood-burning oven for a bakery. It is built of solid brick with a sheet iron door. This type of oven has operated successfully in Nepal.
- *"Wood Oven." Cali, Colombia: Comunidad de San Gabriel, n.d. (4 pp.) V-C-1
010236
Explains and diagrams improvements that have been made on ovens commonly found in Latin America.

Stove Dissemination

- *CILSS. "Unité écologie-forêts-environnement-sylvo-pastoral." Ouagadougou, Upper Volta: CILSS, 1981. (28 pp.)
Outlines programs either planned or operational, designed to conserve natural resources and combat desertification in the CILSS-member countries in the Sahel. Annex III deals with the program to improve wood-burning stoves, improvement of traditional stoves, the transfer and adaptation of new technologies, the testing of designs and materials, and dissemination of the technology. XIV-B-2
(Fre)
010790
- *"Des Cuisinières à bois et à charbon pour la survie du Sahel." Le Soleil, August 4, 1980, pp. 6-7.
Article discusses a program launched in Senegal in February 1980, "Ban Ak Suuf," (clay and sand), by CERER. The purpose of the program is to replace traditional three-stone fires with stoves constructed from local materials, clay and sand. The stoves have already been found to be more fuel efficient than traditional methods. V-C-3
(Fre)
010627
- German Appropriate Technology Exchange. "Helping People in Poor Countries Develop Fuel-Saving Cookstoves." Eschborn, Germany: German Appropriate Technology Exchange, 1980. (148 pp.)
The manual is divided into two parts. The first explains ways of working with villagers to design stoves, spread information, train builders and avoid mistakes. The second part contains technical information on how to select design and test stove systems with consideration for socio-economic issues. V-C-2, P1
010308
- *Gubbins, Paula. Improved Cooking Stoves: Involving the User." Arlington, Virginia: VITA, Inc., 1980. (19 pp.)
This presentation focuses on user-centered approach to cookstoves by considering survey questions and instruments, findings on current user acceptance of stoves, and strategies for diffusion of technology on improved stoves. V-C-3
010718
- Hammond, P.B. "Renewable Energy Diffusion in Developing Countries: Towards Strategic Guidelines." Washington, D.C.: National Academy of Sciences, 1980. (58 pp.)
Factors are identified which appear most relevant to the diffusion of renewable energy technologies in developing countries. XVIII-A-4
P2
012312

- Joseph, S., and Y.J. Shanahan. "A Design Strategy for the Implementation of Stove Programmes in Developing Countries." Appropriate Technology, V. 8, No. 2, June 1981, pp. 21-22. II-A-5.2, P1
011461
Outlines a 6-stage strategy to facilitate introduction of improved cooking stoves in developing countries. The strategy is based on an analysis of problems encountered by previous cookstove programs.
- Joseph, S. "Problems and Priorities in Developing Wood Stoves Programs." London: Intermediate Technology Development Group, Dec. 1979. (12 pp.) II-A-6
010705
The paper assesses the prospects for the design and dissemination of efficient biomass-fuel stoves. Analyzes why previous programs have failed and deduces guidelines for design of programs that could impact on wood-fuel consumption.
- *Kate, J.D. "Elements de stratégie pour la satisfaction de besoins en combustibles ligneux du Sahel d'ici à l'an 2000." Ouagadougou, Upper Volta: CILSS, 1979. (42 pp.) X-B-2
(Fre)
010791
The paper elaborates on the need for an ecological plan to satisfy the demand for fuel wood in the Sahel by outlining a 4-fold program and the problems faced. Briefly discussed is the impact of the introduction and diffusion of improved stove technologies.
- "ITDG Stove Program." London: Intermediate Technology Development Group, October 1979. (5 pp.) V-C-2
010717
The ITDG program for testing and modifying stoves to produce a more efficient design is told in a simple story and pictorial form.
- *Lagandre, E., and G. Madon. "Programme des cuisinières 'Ban Ak Suuf'; compte rendu de la réunion du 5 mai 1980." Dakar, Senegal: IPM-CERER, 1980. (24 pp.) V-C-3
(Fre)
010632
Reports on the state of the development, evaluation and diffusion of the 'Ban Ak Suuf' (clay and sand) stove in Senegal.
- *Ulinski, C. "Senegal's Ban Ak Suuf Cookstoves." Washington, D.C.: AID, 1981. (9 pp.) V-C-3, P2
013267
Project report on the Senegalese cookstove program, a joint effort of the government of Senegal, AID, and CERER.
- *Wood T.S. "Woodstove Dissemination in the Sahel: Case Studies and a Few Suggestions." Ouagadougou, Upper Volta: CILSS, 1982. (8 pp.) V-C-3, P3
013424
The experiences of six West African woodstove programs illustrate some of the difficulties of dissemination. The importance of adequate training and follow-up and the dangers of subsidies are common themes. Indicators of woodstove program success are outlined.

Reports

- *"Compte rendu de la réunion 'Foyers Améliorés' du 6 décembre 1979." Ouagadougou, Upper Volta: CILSS, 1979. (6 pp.)
Minutes of this meeting include outlines of the CILSS mission, conclusions on firewood use, and six projects proposed or underway in Upper Volta. Lists some rules to follow when considering the merits of certain types of improved cookstoves.
V-C-3
(Fre)
010626
- *"Contraintes à la diffusion du foyer amélioré en milieu urbain: Proposition d'Amélioration. Bamako, Mali: Association d'Etudes de Technologies Appliquées et d'Aménagement en Afrique (A.E.T.A.) and USAID, November 1982.
This report on the Mali woodstove covers constraints on the diffusion of improved woodstoves in urban areas with recommendations for improvement.
V-C-3
(Fre)
025990
- *Dutt, G.S. "Efficient Wood Burning Cookstoves Literature." Princeton, New Jersey: G.S. Dutt, 1978. (11 pp.)
Short review of literature on wood burning stoves that are considered suitable for cooking in rural areas of the Third World.
V-C-3
010282
- *Dutt, G.S. "Improved Wood Burning Cooking Stoves for LDC's." Princeton, New Jersey: Princeton University, 1980. (8 pp.)
Author suggests considerations that should be kept in mind before initiating programs to build efficient cooking stoves on a global basis. Advises that extension programs' thrust should be to make descriptions of promising designs available along with training, and let local individuals adapt designs to their needs.
V-C-3
010720
- *Dutt, G.S. "Status of Wood Stove Development in Upper Volta." Arlington, Virginia: VITA, Inc., 1981. (28 pp.)
Report includes overview of woodstove programs in Upper Volta and makes recommendations for R&D and dissemination. Cooking practices and current stove designs are also reviewed.
V-C-3, P2
011555
- "Estudio Sobre la Introducción y Adopción de Estufas de Leña Eficientes en Cinco Comunidades de Guatemala." Guatemala: Instituto Centroamericano de Investigación y Tecnología Industrial (ICAITI), 1983.
- *"Evaluation of Chulas." N. Jajodia. Bombay, India: Department of Mechanical Engineering, Indian Institute of Technology, 1980. (87 pp.)
Delves into problems associated with use of chulas, and related factors such as construction materials, level of technology, and socio-cultural harmony.
V-C-6, P1
011610

- *Evans, I., E. Gern, and L. Jacobs. "Improved Cookstoves for Rural Senegal." Arlington, Virginia: VITA, Inc., 1980. (63 pp.)
 Consultants' report to VITA outlining the work accomplished during their first visit to Senegal. A basic Senegalese stove was developed and steps were taken to begin testing the stoves and disseminating the design to rural populations. V-C-3
 007632
- FAO/Ethopia National Workshop on Fuelwood, Nazareth, Ethiopia, Final Report, 28 July - 1 August 1982. Addis Ababa: Forestry and Wildlife Conservation Development Authority, September 1982. XVIII-CA-
 3, P3
 023544
- Gern, E., L. Jacobs, and I. Evans. "Improved Cookstoves in Upper Volta: An Evaluation of the German Forestry Mission's Stove Building Program." Eschborn, Germany: German Appropriate Technology Exchange, 1980. (115 pp.) V-C-3
 007634
 Gives a socio-cultural assessment of the German Forestry Mission stove project in Upper Volta. Recommendations for improved stove designs and stove programs are made.
- *Icerman, L. "Draft Report of the VITA-CDT Cookstove Panel." St. Louis, Missouri: Center for Development Technology, 1979. (10 pp.) V-C-3, P2
 013083
 Report of a discussion held to extract useful inputs for project analysis from the practical insights and experiences of panel members regarding improved cookstove applications and programs in developing countries.
- ITDG Stove Program." London: Intermediate Technology Development Group, October 1979. (5 pp.) V-C-2
 010717
 The ITDG program for testing and modifying stoves to produce a more efficient design is told in a simple story and pictorial form.
- Jones, J. "Diagnostico socio-economico sobre el consumo y produccion de lena en fincas pequenas de la peninsula de Azuero, Panama." Turrialba, Costa Rica: Centro agronomica tropical de investigacion y ensenanza (ATIE), 1982
- Joseph, S. "Don't Forget the Pots." Boiling Point, No. 1, January 1982, pp 4-6. V-C-3, P2
 013067
 The performance of a stove, as part of a cooking system, depends on the type of pots used and how they are positioned in or on the stove. This article reviews the literature on this topic.
- Joseph, S., and J. Kenna. "A Computer Model to Examine the Effect of Cooking Method on Thermal Comfort Level." STOVES PROJECT, Report No. 3.7. London, United Kingdom: Intermediate Technology Group Limited, July 1983.

- Joseph, S., and J. Trussell. "Report on Advisory Visit to the VITA Woodstove Project in Upper Volta, February 16 to March 2, 1981." London: Intermediate Technology Consultants, Ltd., 1981. (62 pp.)
 Reports on an advisory visit made by Joseph and Trussell to design, construct and test woodstoves used without shelter in the Dori and Koudougou regions of Upper Volta. Also discusses work done with Tim Wood of VITA/CILSS on the firing of clay stoves and the introduction and testing of prototypes. Includes recommendations. V-C-3
 010870
- *Ki-Zerbo, J. "Improved Wood Stoves: Users' Needs and Expectations in Upper Volta." Arlington, Virginia: VITA, Inc., 1980. (88 pp.)
 Report represents the results of a sociological study on the eating habits and culinary practices of the Sahelian population. A part of the study concentrated on the types of cookstoves in use, the fuels utilized, and preferences of women who do the cooking. (Also available in French, "Les Foyers améliorés: besoins et attentes des utilisateurs voltaïques.") V-C-3
 010630
- *Ki-Zerbo, J., and G. de Lepeleire. "L'Amélioration des foyers pour l'utilisation domestique du bois de feu: ses possibilités et son impact au Sahel." Paris: Club du Sahel, 1979. (70 pp.)
 Report assesses the firewood situation in the Sahel, research in progress on cookstoves and possible alternative energy sources. A cookstove project is proposed. XVIII-CA-3
 (Fre)
 005913
- Morgan, R.P., et.al. "Appropriate Technology for Renewable Resource Utilization: Final Report" (2 volumes.) Norfolk, Virginia: AID R&D Distribution Center., 1979. (250 pp.)
 II-A-2.3
 008228
 008229
- Morgan, R.P. "Renewable Energy and Basic Human Needs." Address prepared for Energy Workshop Panel, Society for International Development Conference on "Ten Years of New Directions: Assessing Development Strategies." Washington, DC, March 16, 1983.
- National Academy of Sciences. Proceedings of the International Workshop on Energy Survey Methodologies for Developing Countries. Washington, D.C.: National Academy of Sciences, 1980. (220 pp.)
 Report includes working group summary reports and excerpts of papers on energy use in selected developing countries, and a directory of energy surveys for developing countries. XVIII-A-1
 (NAS)
 016493

- Roggeman, J.B. "Les fourneaux améliorés dans le Sahel: rapport sur les caractéristiques thermiques des fourneaux améliorés à bois." Paris 16, France: Organization for Economic Cooperation and Development, 1980. (67 pp.)
 Reports on the characteristics of improved woodstoves, outlines the socio-economic situation in the Sahel and the current status of the woodstoves in that region. Makes recommendations on future improvements of stoves that can replace the traditional 3-stone method of cooking. V-C-3
 (Fre)
 010722
- Singer, H. "Report to the Government of Indonesia: Improvement of Fuelwood Cooking Stoves and Economy in Fuelwood Consumption." Rome: FAO, 1961. (23 pp.)
 Report discusses the economics of fuelwood consumption in Indonesia and examines how traditional stoves can be improved and new designs can be introduced to improve fuelwood efficiency. V-C-3
 010284
- Smith, Kirk R. "Village Cooks and Indoor Air Pollution: The Dark Side of Small is Beautiful." Paper 83-9.4. Honolulu, Hawaii: East-West Center, June 1983.
 Paper presented at the 76th Annual Meeting of the Air Pollution Control Association, Atlanta, Georgia.
- Smith, Kirk R., A.L. Aggarwal, and R.M. Dane. "Air Pollution and Rural Biomass Fuels in Developing Countries." Honolulu, Hawaii: East-West Center, February 1983.
 A pilot village study in India and implications for research and policy.
- Smith, Kirk R., and Carol Colfer. "Cooks on the World Stage: The Forgotten Actresses/Actors." Working Paper WP 83-5. Honolulu, Hawaii: Resource Systems Institute, East-West Center, April 1983.
- *Stoop, F. "Rapport fin de mission 'Foyers améliorés'." Ouagadougou, Upper Volta: CILSS, February, 1980. (20 pp.)
 This final report provides a summary of studies, activities and task force activities concerned with the improvement of stoves in Upper Volta. Different projects are listed, addresses and telephone numbers are provided. V-C-3
 (Fre)
 010638
- *"Stoves in Senegal." Bombay: Tata Energy Research Institute Documentation Center, n.d. (2 pp.)
 Section from a Tata publication actually discusses developments in regard to woodstoves in Senegal, the Philippines and the U.S. V-C-3, P3
 013425
- *Strasfogel, S., and G. Dechambre. "Les foyers améliorés au Sahel." Marseille: Association Bois de Feu, January 1983. (17 pp.)

- Swiss Center for Appropriate Technology. "Improved Cooking Stoves." Gallen, Switzerland: Swiss Center for Appropriate Technology, n.d. (49 pp.) V-C-2
010298
The booklet is a compilation of articles that discuss such topics as improvement of the Ghanaian baking oven, the Lorena cookstove, the sociocultural assessment of the Lorena stove, and the new Nepali chulo.
- Tata Energy Research Institute. "Solid Fuel Cooking Stoves." Bombay, India: Tata Energy Research Institute, 1980. (116 pp.) V-C-4
010246
The document is a survey of significant world literature on solid fuel cooking stoves. It provides a systematic presentation of all known stove designs complete with illustrations.
- *Tata Energy Research Institute. "Solid Fuel Cooking Stoves Bibliography." Bombay, India: Tata Energy Research Institute, 1981. (28 pp.) V-C-2, P1
011033
Bibliography on various types of stoves. Includes abstracts.
- *Tata Energy Research Institute. "Solid Fuel Cooking Stoves: International Directory." Bombay, India: Tata Energy Research Institute, 1981. (29 pp.) V-C-2, P1
007540
Lists organizations and research groups currently working on cooking stoves.
- *Theodorovic, B. "Experiments with the Improved Egyptian Rural Stove." Menoufia, Egypt: Arab State Fundamental Education Center, 1954. (4 pp.) V-C-6
010243
Paper discusses adaptations made to existing rural stoves to suit characteristics of the rural house in lower Egypt. Outlines experiments conducted and compares the results using diagrams.
- Thomas, Margaret. and Glenn Burket. "Stove Consultancy for Lesotho RET Project." Burlington, Vermont: Associates in Rural Development, January 1983.
- *VITA. "A State-of-the Art Report on Woodstoves in the Sahel." Arlington, Virginia: VITA, Inc., 1981. (70 pp.) V-C-3, P2
011223
Discusses the development and dissemination of woodstoves suited to the Sahel region of Africa from both technical and sociological viewpoints.
- *Wood, T. "Woodstove Dissemination in the Sahel: Case Studies and a Few Suggestions." V-C-3, P3
013424
The experiences of six West African woodstove programs illustrate some of the difficulties of dissemination. The importance of adequate training and follow-up and the dangers of subsidies are common themes. Indicators of woodstove program success are outlined.

