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.W. Sawahel, "Sudan sets its sights on biofuels" (Science and Development Network, 25 June 2009) ()

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OPEC Fund for International Development (OFID), "Biofuels and food security" (2009); and Organisation for Economic Co-operation and Development (OECD), "Biofuel support policies: An economic assessment" (2008).

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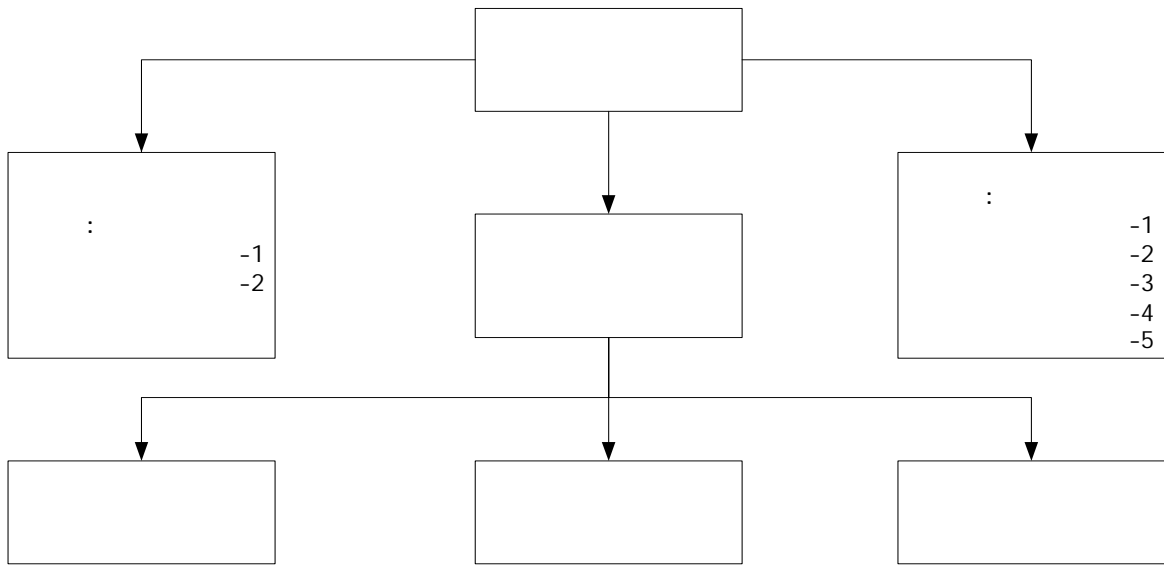
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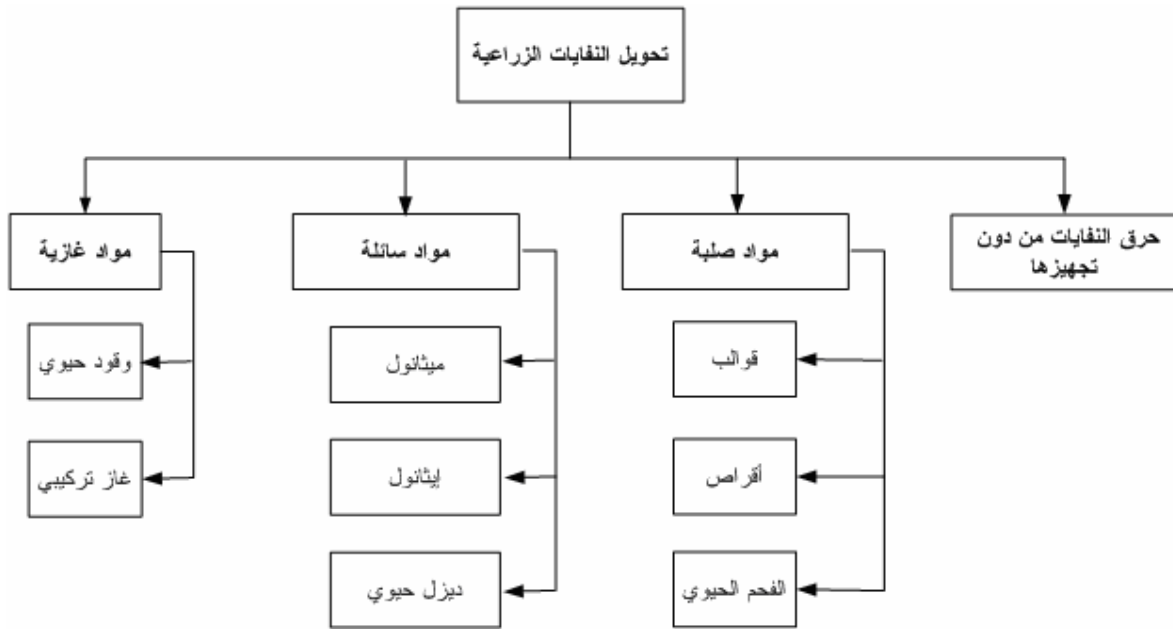
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See, for example, the following: (a) A.M. Omer, "Organic waste treatment for power production and energy supply", () *Journal of Cell and Animal Biology*, vol. 1, No. 2 (October 2007), pp. 034-047; (b) Department of Economic and Social Affairs (DESA), "Small-scale production and use of liquid biofuels in sub-Saharan Africa: Perspectives for sustainable development" (2007), which is available at: www.un.org/esa/sustdev/csd/csd15/documents/csd15_bp2.pdf; (c) Wetlands International, "Biofuels in Africa: An assessment of risks and benefits for African wetlands" (May 2008), which is available at: http://www.aidenvironment.org/Upload/Files/xhtvkw/Biofuels%20in%20Africa_study%20WI.pdf; (d) European Commission, Directorate-General for Research, Information and Communication Unit, "Energy scientific and technological indicators and references" (2005), which is available at: http://europa.eu.int/comm/research/rtdinfo/index_en.html; and (e) The Royal Society, "Sustainable biofuels: prospects and challenges" (14 January 2008), which is available at: <http://royalsociety.org/displaypagedoc.asp?id=28914>.

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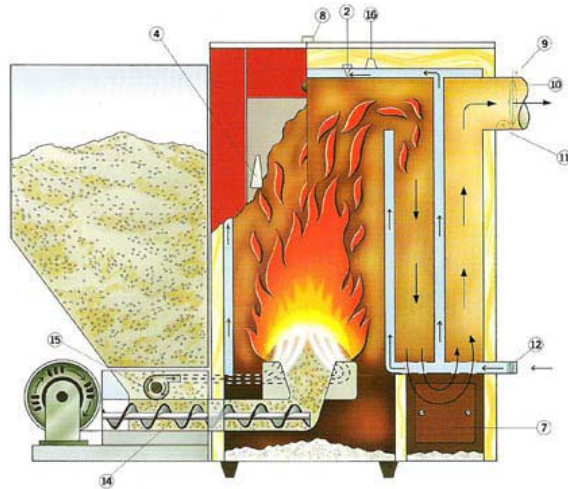
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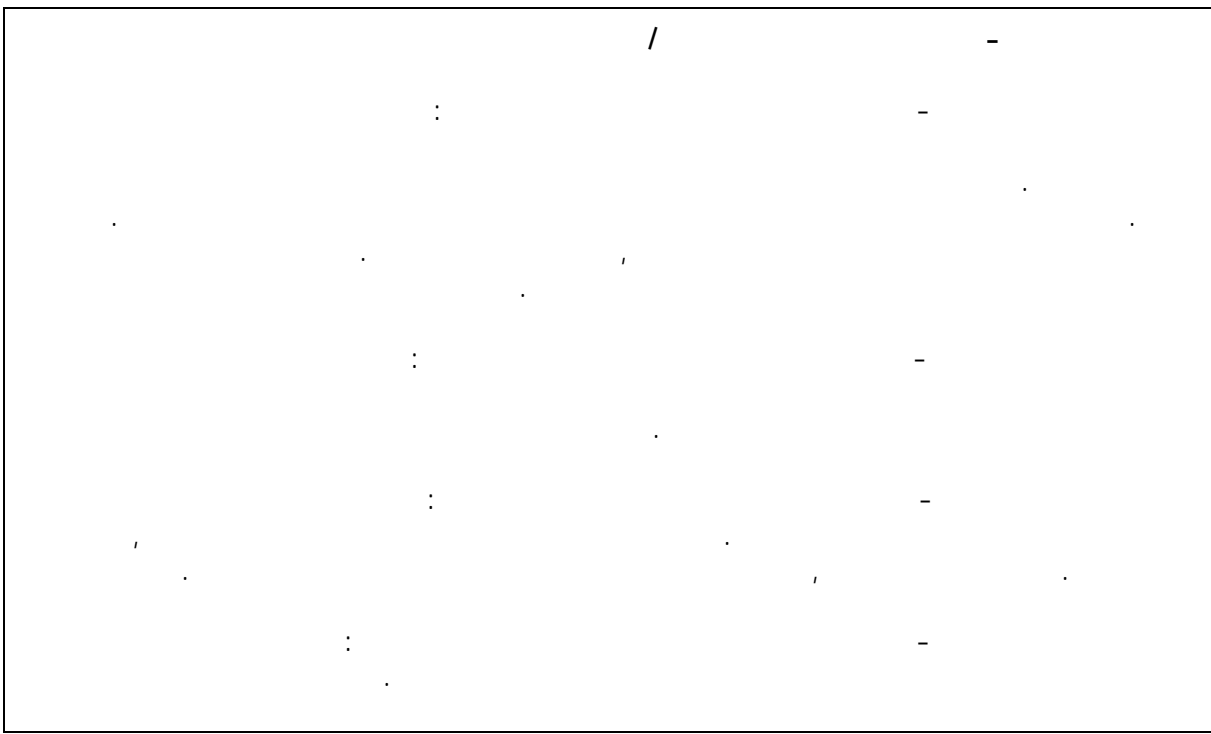
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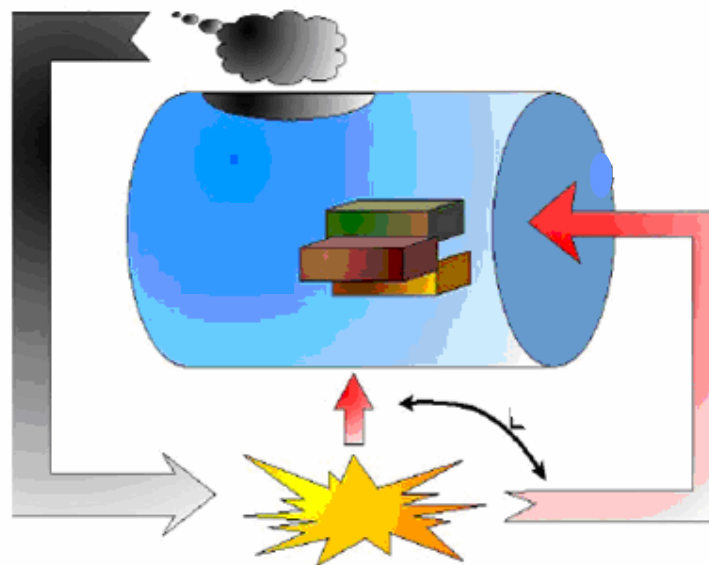
G. Pari et al., "Charcoal production for carbon sequestration" (2004), which is available at: <http://project.jica.go.jp/indonesia/006504510/archives/pdf/output3.pdf>. ()

S.H. Hibajene and O.S. Kalumiana, "Manual for charcoal production in earth kilns in Zambia" (2003), which is available at: <http://www.bioquest.se/reports/Charcoal%20production%20manual%20ENGLISH.pdf>. ()

Food and Agriculture Organization (FAO), "Industrial charcoal production – Development of a sustainable charcoal industry" (June 2008), which is available at: http://www.drveniugljen.hr/assets/files/pdf/FAO_Industrial%20charcoal%20production.pdf. ()

R.C. Pal and V.K. Singh, "Charcoal making technology for livelihood for rural people", which is available at: www.fuelnetwork.org/index.php?option=com_docman&task=doc_download&gid=207. ()

Food and Agriculture Organization (FAO), "Industrial charcoal production – Development of a sustainable charcoal industry" (June 2008), which is available at: http://www.drveniugljen.hr/assets/files/pdf/FAO_Industrial%20charcoal%20production.pdf. ()



International Biochar Initiative, "Biochar Policy at the International and Federal Levels" (May 2009), which is available at: www.biochar-international.org.

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International Society of Sugar Cane Technologists, "Design, build-up and evaluation of a sugarcane biomass () (bagasse and trash) gasification pilot plant with 3 MWE of power" (June 2007), project proposal for the International Sugarcane Biomass Utilization Consortium (ISBUC), which is available at: <http://issct.intnet.mu/ISBUCresprop1.HTM>.

TDC-Olive, "By-product reusing from olive and olive oil production", which is available at: () <http://www.biomatnet.org/publications/1859bp.pdf>.

G.L. Shukla and K.A. Prabhu, "Bio-gas production from sugarcane biomass and agro-industrial waste", which is () available at: <http://www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=19960302970>.

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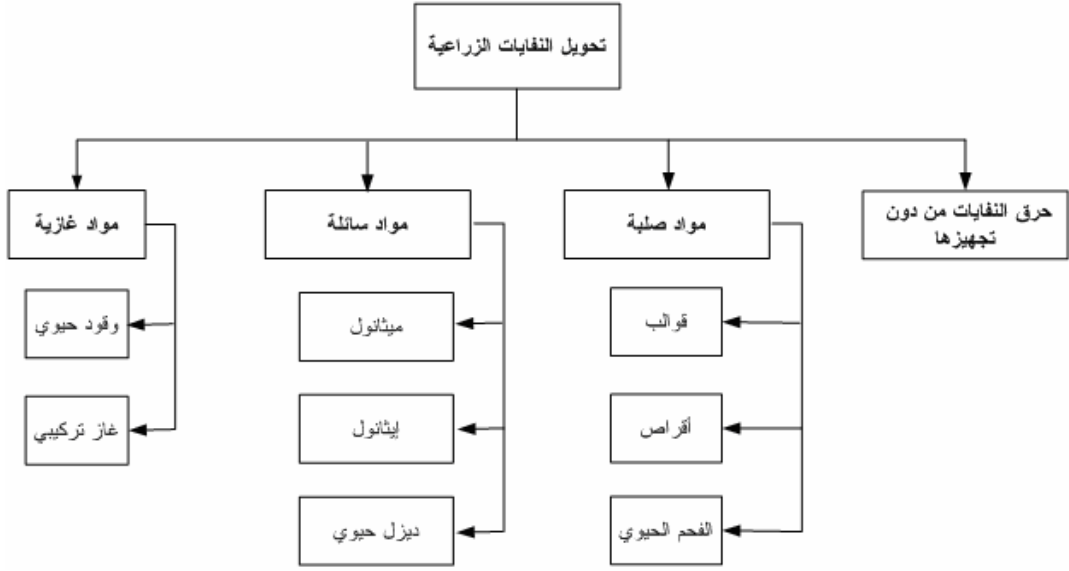
Engler, C.R., Jordan, E. R., McFarland, M.J. and Lacewell, R.D. Economic and Environmental Impact of Biogas : _____
www.agmrc.org/media/cms/Engler2_F05E9EA9371B6.pdf : .Production as a Manure Management Strategy

A.A. Atayol, “Anaerobic co-treatability of olive mill wastewaters and domestic wastewater” (Izmir Institute of ()
 Technology, Izmir, Turkey, 2003), which is available at: <http://library.iyte.edu.tr/tezler/master/cevremuh/T000239.pdf>

.D. Kannan, “Renewable energy in developing countries with an emphasis on India” ()
<http://folk.ntnu.no/kannan/> :
[renewable_energy_isfit09_presentation.pdf](http://folk.ntnu.no/kannan/renewable_energy_isfit09_presentation.pdf)

- - -

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See K.L. Kadam, "Environmental life cycle implications of using bagasse-derived ethanol as a gasoline oxygenate in () Mumbai (Bombay)" (November 2000), which is available at: www.nrel.gov/docs/fy01osti/28705.pdf; M.I. Rajoka, "The enzymatic hydrolysis and fermentation of pretreated wheat straw and bagasse to ethanol", *ATDF Journal*, vol. 2, No. 2 (2005), which is available at: www.atdforum.org/IMG/pdf/ethanol.pdf; and A. Hinkova and Z. Bubnik, "Sugar beet as a raw material for bioethanol production", *Czech J. Food Science*, vol. 19, No. 6 (2001), pp. 224-234, which is available at: www.cazv.cz/attachments/5-Hinkova.pdf.

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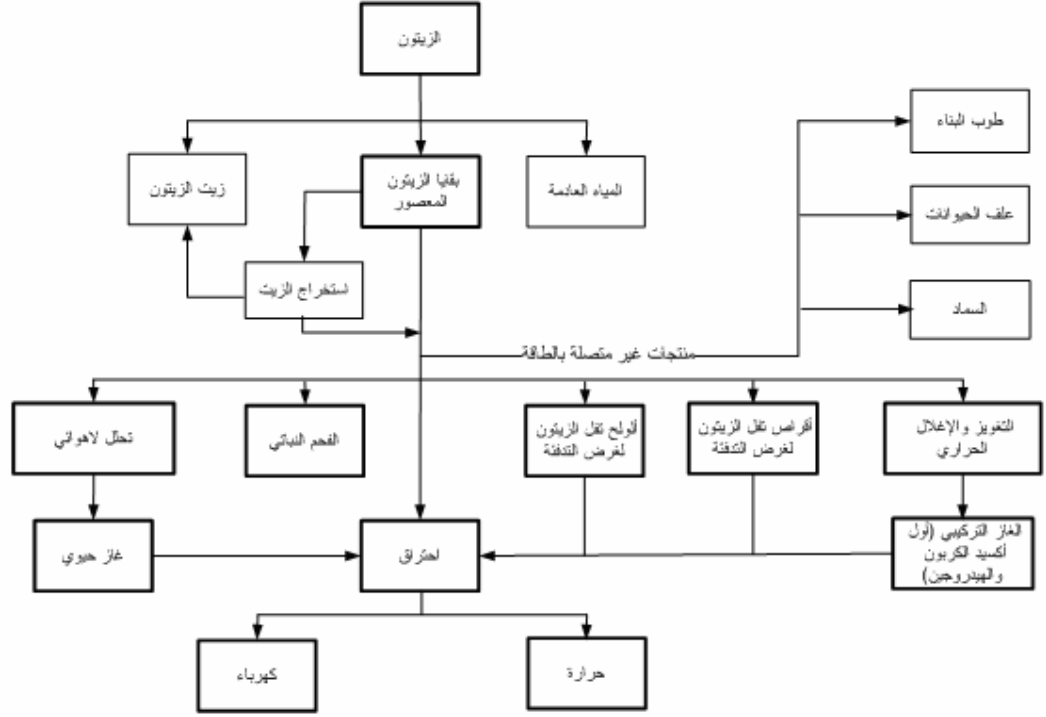
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European Community Contribution Agreement with an International Organization, "Integrated waste management for the : _____ olive oil pressing industries in Lebanon, Syria and Jordan" (2003), which is available at: http://www.undp-jordan.org/Portals/0/OO_per_cent20PD_per_cent201.pdf; A. Salibi, "Marketing study for olive, olive oil and apple in Lebanon" (June 2007), which is available at: <http://www.agriculture.gov.lb/Studies/Bseline%20study%20for%20Apple%20and%20olive%20June%202007-GTFS-REM-070-ITA.pdf>; and F.M. Santucci, "Organic agriculture and olive oil production in the southern Mediterranean countries" (OLIBIO Research Project, 2007), which is available at: http://orgprints.org/13528/01/Santucci-OA_in_the_Med.pdf.

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Ministry of Economy and Trade in Lebanon, "Integrated assessment of the Lebanon-EU Association Agreement: A pilot study on the Lebanese olive oil sector" (February 2006), which is available at: www.economy.gov.lb/NR/rdonlyres/6BD2EE6D-81D5-49E6-894A-1E1A931BCAAC/0/ExecutivesummaryUNEP28February.pdf :
<http://unpan1.un.org/intradoc/groups/public/documents/ARADO/UNPAN020869.pdf> :

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(E/ESCWA/SDPD/2005/6)

M.I. al-Widyan, G. Tashtoush and A.M. Hamasha, "Combustion and emissions of pulverized olive cake in tube furnace", *Science Direct* (2006), which is available at: <http://linkinghub.elsevier.com/retrieve/pii/S0196890405001998>.

TDC-Olive, "By-product reusing from olive and olive oil production", which is available at: <http://www.biomatnet.org/publications/1859bp.pdf>.

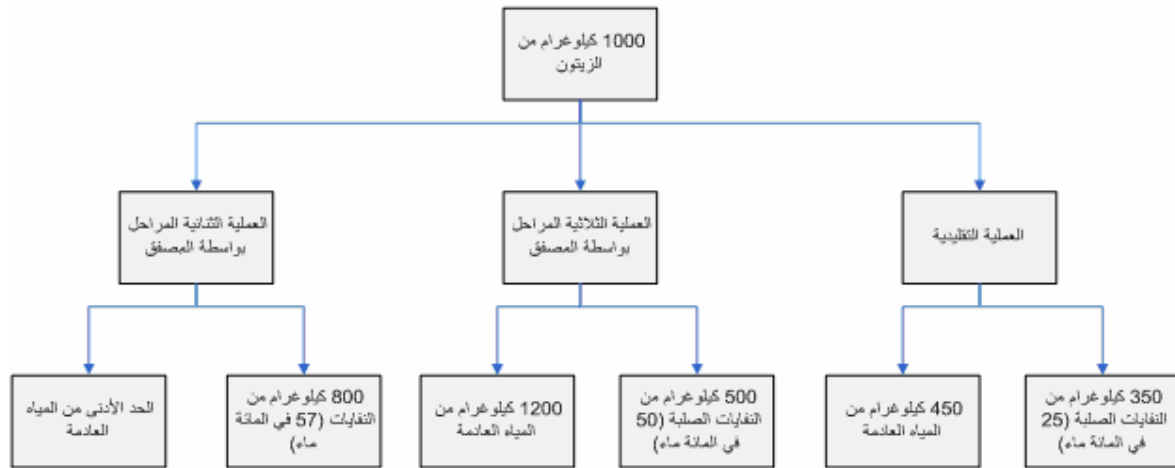
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European Community Contribution Agreement with an International Organization, "Integrated waste management for the : _____ olive oil pressing industries in Lebanon, Syria and Jordan" (2003); A. Salibi, "Marketing study for olive, olive oil and apple in Lebanon" (June 2007 Ministry of Economy and Trade in Lebanon, "Integrated assessment of the Lebanon-EU Association Agreement: A pilot study on the Lebanese olive oil sector" (February 2006); S. al-Shdiefat, M.S. el-Habbab and A. al-Sha'er, "Introducing organic farming system in olive production and linking small farmers to markets"; A.M. Aqeel and K.M. Hameed, "Implementation of olive mill by products in agriculture", *World Journal of Agricultural Sciences*, vol. 3, No. 3 (2007); M. Ghazal and H. Namrouqa, "Jordan: Pilot plant to treat olive vegetable water", *Jordan Times* (1 July 2007); The Olive Oil Source, "Disposal of olive processing by-products"; H. Shaheen and R. Abdel Karim, "Management of olive-mills wastewater in Palestine" (2007); F. Aqra et al., "Reducing the environmental impact of olive mill wastewater", *American Journal of Environmental Science*, vol. 5, No. 1 (2009); and W. al-Tawil, "Syrian Arab Republic" (CIHEAM-Option Méditerranéennes, 2001).

(..) : _____

() ()

See Management of Resources and Environment Solutions (MORES), which is available at: () <http://www.mores.com.lb/>.



TDC-Olive, “By-product reusing from olive and olive oil production”, which is available at: <http://www.biomatnet.org/publications/1859bp.pdf>.

.Ibid ()

TDC-Olive, “By-product reusing from olive and olive oil production”, which is available at: <http://www.biomatnet.org/publications/1859bp.pdf>.

K. Tsiftes and P.A. Fokaides, “Utilization of olive husk in energy sector in Cyprus”, *Renewable Energy Sources & Energy Efficiency* (2007), which is available at: www.tekes.fi/eu/fin/partnerinhaku/energia_tiedostot/Fokaides_cypros.pdf.

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K. Tsiftes and P.A. Fokaides, "Utilization of olive husk in energy sector in Cyprus", *Renewable Energy Sources & Energy Efficiency* (2007), which is available at: www.tekes.fi/eu/fin/partnerinhaku/energia_tiedostot/Fokaides_cypros.pdf

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_____ TDC-Olive, op. cit ()

M. Niaounakis and C.P. Halvadakis, *Olive processing waste management: Literature review and patent survey*, () vol. 5, second edition (2006).

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K. Tsiftes and P.A. Fokaides, "Utilization of olive husk in energy sector in Cyprus", *Renewable Energy Sources () & Energy Efficiency* (2007), which is available at: www.tekes.fi/eu/fin/partnerinhaku/energia_tiedostot/Fokaides_cypros.pdf.

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Weima, "High performance briquetting system for volume reduction" (2009), which is available at: ()
<http://www.bestmachinery.hu/pdf/weima-th-400-e.pdf>

R. Bailey, M. Colombo and W.N. Scott, "A 4 MWe biogas engine fueled by the gasification of the production of ()
olive oil wastes (sansa)", which is available at: <http://www.brdisolutions.com/pdfs/bcota/abstracts/9/25.pdf>

[.http://www.srfo.org/index.asp?ln=ar](http://www.srfo.org/index.asp?ln=ar) ()

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Regional Energy Agency for Central Macedonia, "Market of olive residues for energy" (2008), which is available at : _____
http://www.moreintelligentenergy.eu/public/file/publications/More_WP3_D%203.pdf.

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.Four Seasons Fuel Ltd, which is available at: <http://www.fourseasonsfuel.co.uk/charcoal-retorts.asp> ; _____

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"Low cost retort kiln called 'adam-retort' or ICPS (Improved Charcoal Production System" (2009), which is () available at: <http://www.biocoal.org/3.html>.

"How products are made: Charcoal briquettes" (2009), which is available at: <http://www.madehow.com/Volume-4/Charcoal-Briquette.html>. ()

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K.H. el Ashmawy et al., "Socioeconomic and environmental aspects of women labor in the Egyptian agricultural () sector: Case study of sugar crops", *American-Eurasian Journal of Agriculture and Environment Science*, vol. 2, No. 3 (2007), pp. 255-260, which is available at: [www.idosi.org/aejaes/jaes2\(3\)/8.pdf](http://www.idosi.org/aejaes/jaes2(3)/8.pdf).

G-R. Travis, "An overview of sugar culture in Morocco, particularly within a Berber community in Rastabouda" () (thesis, December 2007).

.Ibid ()

United States Department of Agriculture, "USDA national agriculture statistics services – quick stats", which is () available at: www.nass.usda.gov.

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S.M. el-Haggar et al., "Environmentally balanced industrial complex for the cane sugar industry in Egypt", which () was presented at Proceedings International Hydrogen Energy Congress and Exhibition IHEC 2005 (Istanbul, Turkey, 13-15 July 2005) and is available at: www.unido-ichet.org/ihec2005/files/manuscripts/EL_per_cent20Haggar_per_cent20S.M-Egypt.pdf.

B. Haussier, "Quena: Successful start-up of the world's most modern bagasse paper mill", which is available at: () www.voithpaper.com/media/vp_tw12_quena_en.pdf.

Nag Hamady for Wood production and Fabrication Company, which is available at: <http://server.egypt.com/egypt/egydirectory/detail/2620/nag-hamady-for-wood-production-and-fabrication-co.html>. ()

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www.gom.com.eg/algomhuria/2005/06/06/stock/detail04.shtml : ()

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S.A. Alam, "Use of biomass fuels in the brick-making industries of Sudan: Implications for deforestation and greenhouse emission" (Department of Forest Ecology, University of Helsinki, Finland, 2006), which is available at: <https://oa.doria.fi/handle/10024/3159>.

W. O. Ahmed, "Briquettes in Sudan", No. 39 (1997), which is available at: <http://www.hedon.info/BriquettesInSudan>.

.See "Miracle of sugar in the desert", which is available at: www.worldreport-ind.com/sudan/sugar.htm

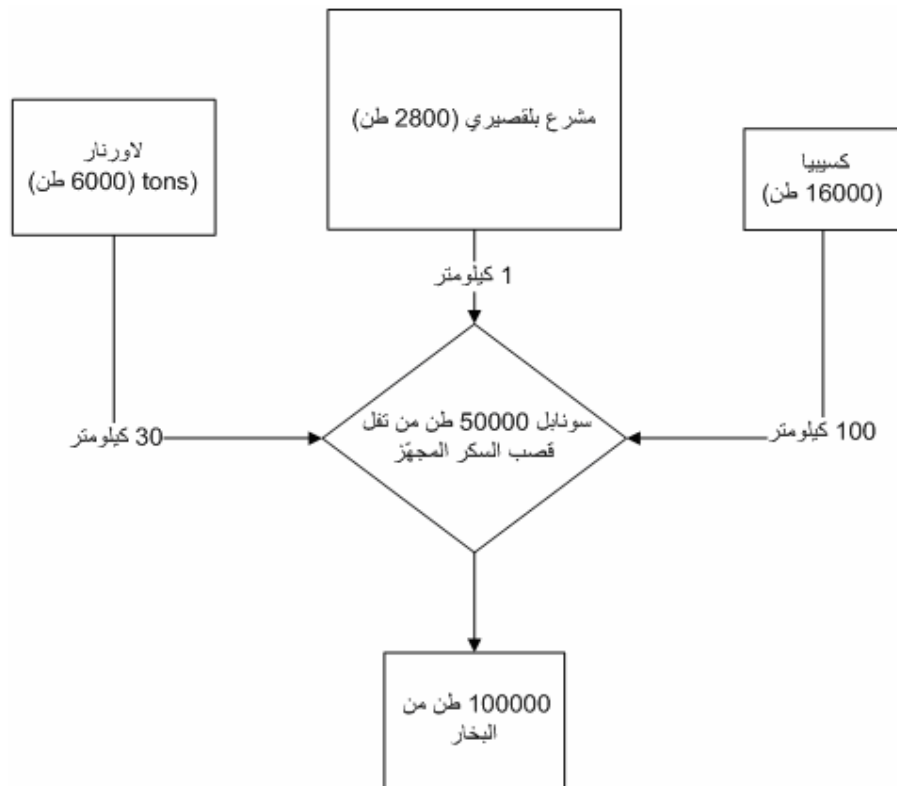
Basin, "Utilization of Bagasse in brickmaking: R & D in Sudan"; *Wall Building Technical Brief* (Advisory Service and Information Network, 1999).

R.V. Siemons, "Carbonization of fresh bagasse" (December 1993), which is available at: www.cleanfuels.nl/Projects%20&%20publications/Bagasse%20Carbo&agglomeration.pdf.

A.M. Omer, "Biomass energy potential and future prospect in Sudan", *Renewable and Sustainable Energy Reviews*, vol. 9 (2005), pp. 1-27.

United Nations Framework Convention on Climate Change (UNFCCC), "Clean Development Mechanism Project Design" (3 December 2006).

()



()

()

S.M. el-Haggar et al., "Environmentally balanced industrial complex for the cane sugar industry in Egypt", which () was presented at Proceedings International Hydrogen Energy Congress and Exhibition IHEC 2005 (Istanbul, Turkey, 13-15 July 2005) and is available at: www.unido-ichet.org/ihec2005/files/manuscripts/EL%20Haggar%20S.M-Egypt.pdf.

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Southern Minnesota Sugar Cooperative, "Facts about sugar beets and beet sugar", which is available at: ()
<http://www.sbreb.org/brochures/SugarCoop/>.

M. Hadjipanayiotou et al., "Feeding ensiled poultry excreta to ruminant animals in Syria", *Livestock Research for Rural Development*, vol. 5, No. 1 (June 1993), which is available at: www.fao.org/ag/agap/frg/Irrd/Irrd5/1/syria1.htm. ()

<http://faostat.fao.org> : ()

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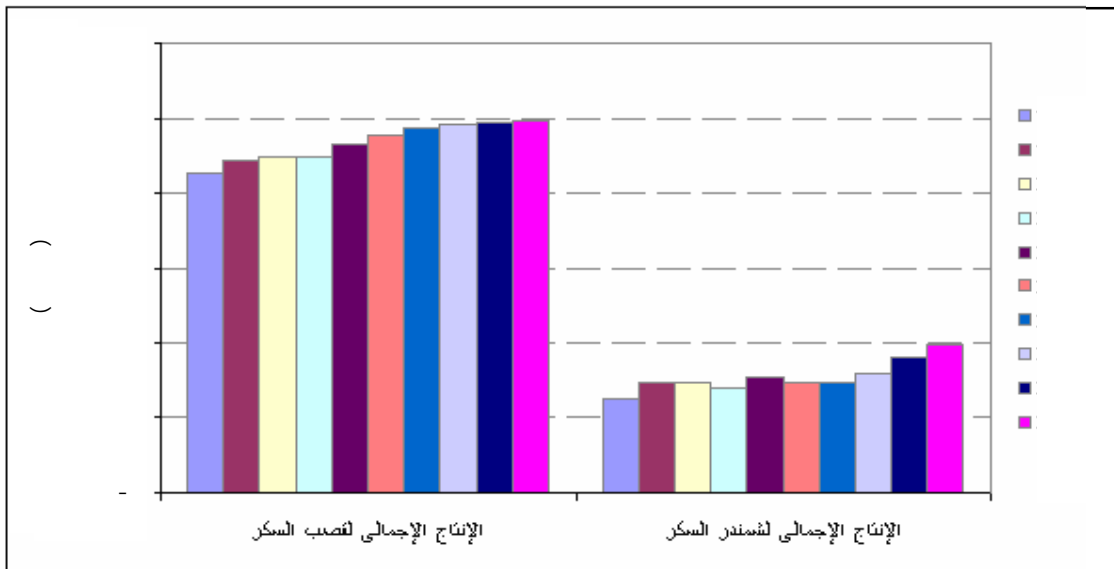
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<http://faostat.fao.org> :

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H.K. Hassan, "Arab region prospects of sugar crops as sources of food and energy", which was presented at the () International Conference on World Prospects of Sugar Crops as Sources of Food and Energy Suppliers (Luxor, Egypt, 1-4 March 2009).

www.gom.com.eg/algomhuria/2005/06/06/stock/detail04.shtml :

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.See "Miracle of sugar in the desert", which is available at: www.worldreport-ind.com/sudan/sugar.htm ()

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[.http://faostat.fao.org](http://faostat.fao.org) :

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H.K. Hassan, "Arab region prospects of sugar crops as sources of food and energy", which was presented at the () International Conference on World Prospects of Sugar Crops as Sources of Food and Energy Suppliers (Luxor, Egypt, 1-4 March 2009).

Summit Communications, "Sweet taste of success" (2009), which is available at: www.summitreports.com/sudan/sugar.htm ()

M. Westlake, "Economics of main sub-sectors in Syrian agriculture" (2003), which is available at: <http://www.fao.org/docrep/006/Y4890E/y4890e0e.htm> ()

USDA Foreign Agricultural Service, "Syria: Trade Policy Monitoring – Annual 2009" (November 2009), which is () available at: <http://www.fas.usda.gov/gainfiles/200903/146337511.pdf>.

Zawya, "Syria industry: National sugar company's Jandar plant set to start production sugar" (2007), which is () available at: <http://www.zawya.com/countries/sy/macrowatch.cfm?eiusection=NATIONAL%20SUGAR%20COMPANY'S%20JANDAR%20PLANT%20SET%20TO%20START%20PRODUCTION>.

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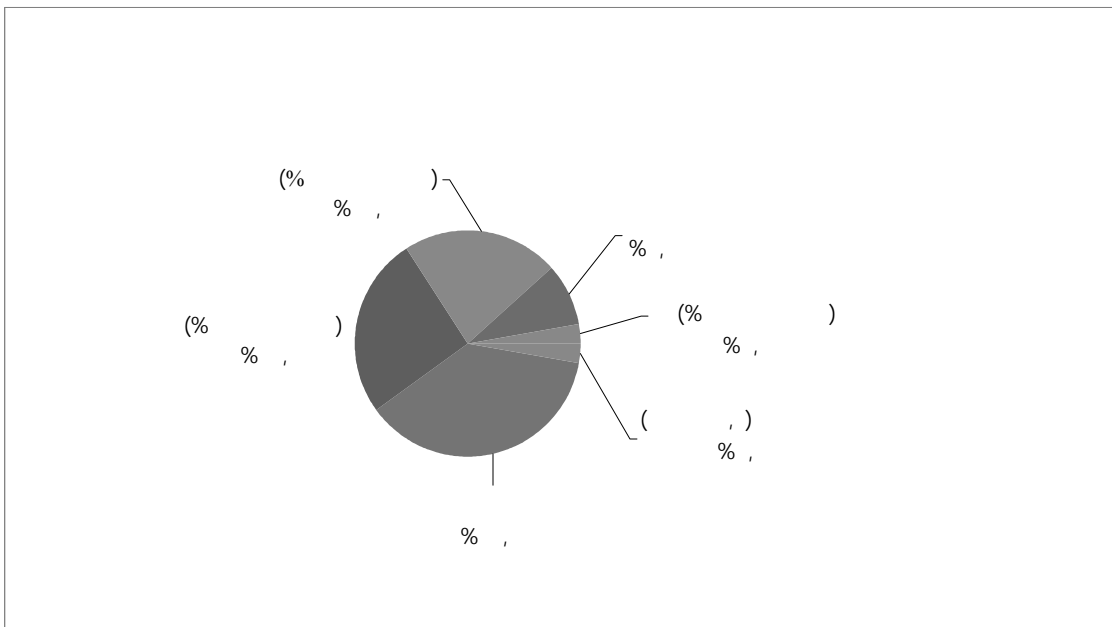
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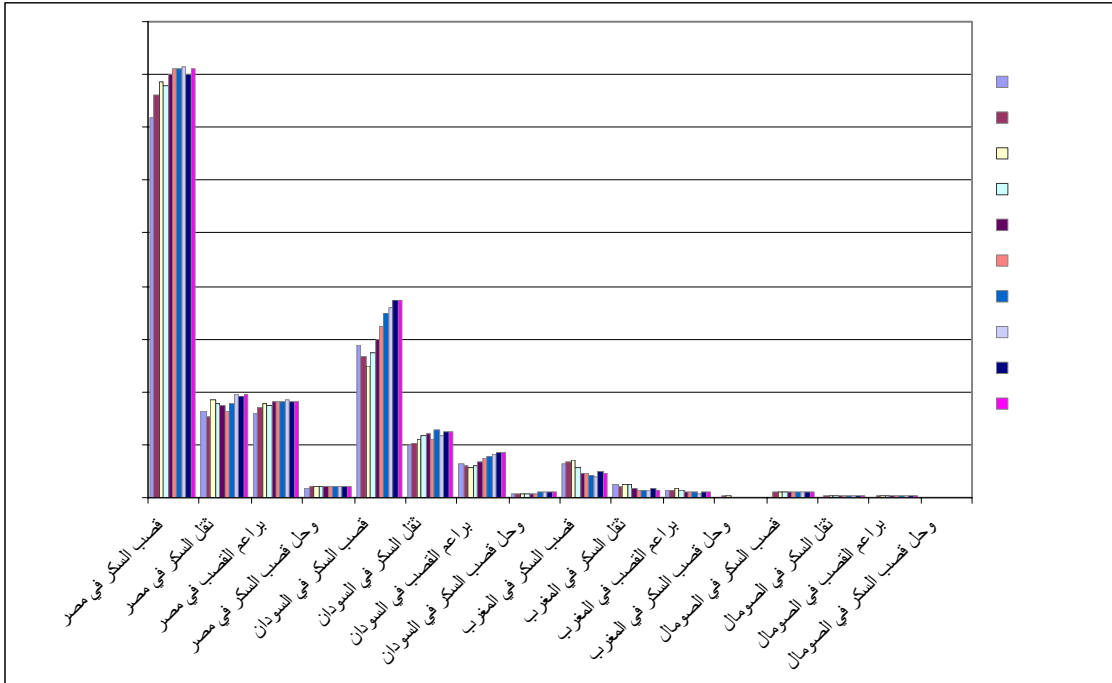
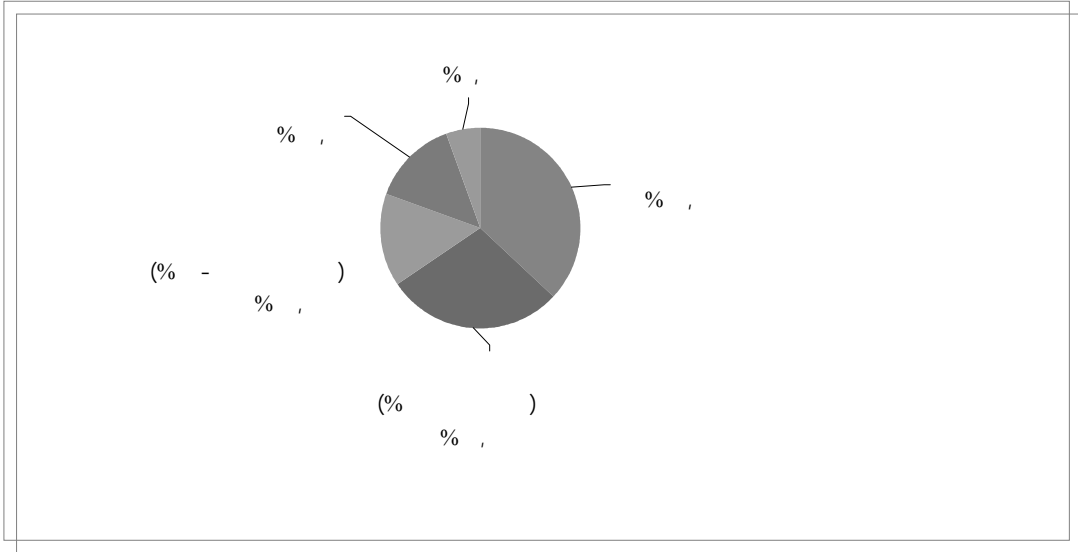
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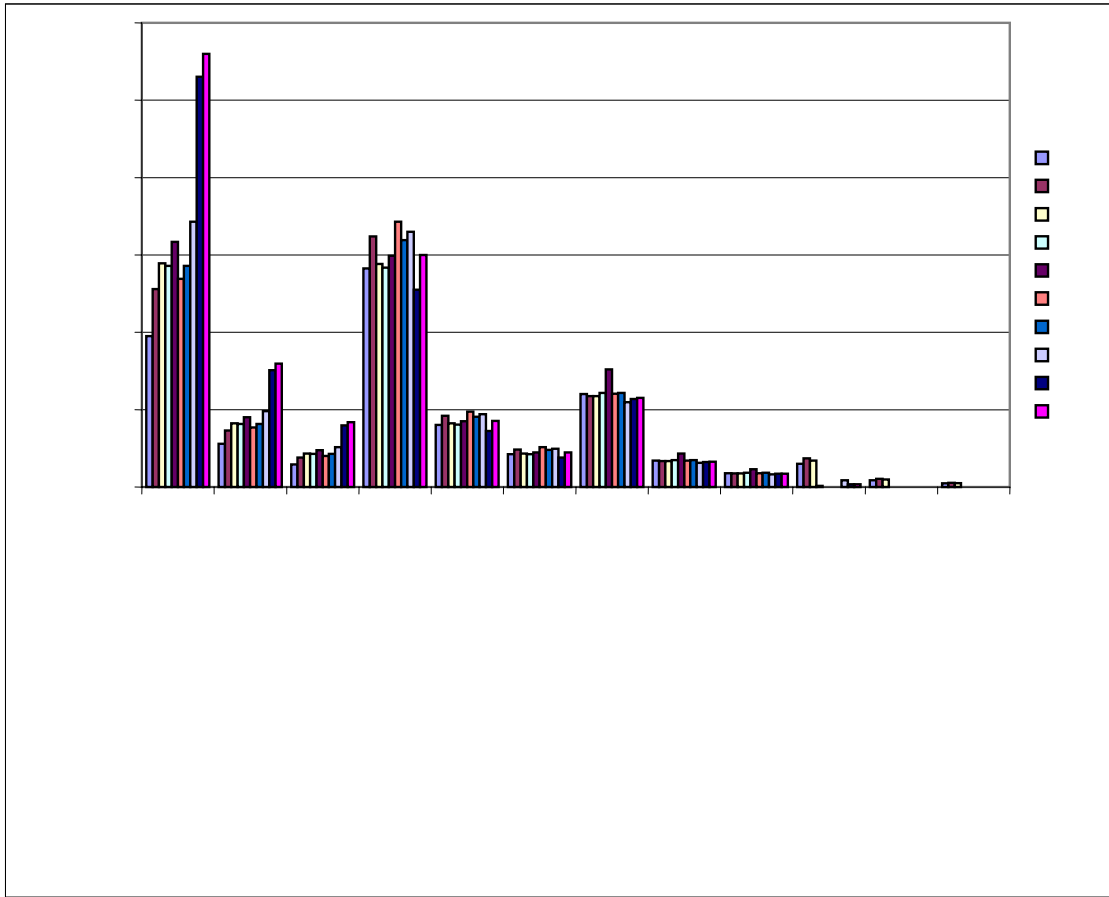
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A. Alam, "Growing sugar crops for food, feed and fuel", which was presented at International Conference on World () Prospects of Sugar Crops as Sources of Food and Energy Suppliers (Luxor, Egypt, 1-4 March 2009); United States Department of Agriculture, "USDA national agriculture statistics services – quick stats", which is available at: www.nass.usda.gov; and A. Rouilly, J. Jorda and L. Rigal, "Thermo-mechanical processing of sugar beet pulp. I. Twin screw extrusion process", *Carbohydrate Polymers*, vol. 66 (2006), pp. 81-87.

See United Nations data, which is available at: www.data.un.org; and NationMaster, which is available at: () www.nationmaster.com.





United States Department of Agriculture, "USDA national agriculture statistics services – quick stats", which is available : _____ at: www.nass.usda.gov; and A. Rouilly, J. Jorda and L. Rigal, "Thermo-mechanical processing of sugar beet pulp. I. Twin screw extrusion process", *Carbohydrate Polymers*, vol. 66 (2006), pp. 81-87.

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(a) A.M. Omer, "Organic waste treatment for power production and energy supply", *Journal of Cell and Animal Biology*, vol. 1, No. 2 (October 2007), pp. 034-047; (b) Department of Economic and Social Affairs (DESA), "Small-scale production and use of liquid biofuels in sub-Saharan Africa: Perspectives for sustainable development" (2007), which is available at: www.un.org/esa/sustdev/csd/csd15/documents/csd15_bp2.pdf; (c) Wetlands International, "Biofuels in Africa: An assessment of risks and benefits for African wetlands" (May 2008), which is available at: http://www.aidenvironment.org/Upload/Files/xhtvkw/Biofuels%20in%20Africa_study%20WI.pdf; (d) European Commission, Directorate-General for Research, Information and Communication Unit, "Energy scientific and technological indicators and references" (2005), which is available at: http://europa.eu.int/comm/research/rtdinfo/index_en.html; and (e) The Royal Society, "Sustainable biofuels: prospects and challenges" (14 January 2008), which is available at: <http://royalsociety.org/displaypagedoc.asp?id=28914>.

Free Patents Online, "Method and device for pelletizing unprocessed sugar-cane bagasse" (4 April 2007), which is () available at: www.freepatentsonline.com/EP1770152.html.

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See, for example, the following: (a) S.M. el-Haggar et al., “Environmentally balanced industrial complex for the cane () sugar industry in Egypt”, which was presented at Proceedings International Hydrogen Energy Congress and Exhibition IHEC 2005 (Istanbul, Turkey, 13-15 July 2005) and is available at: www.unido-ichet.org/ihec2005/files/manuscripts/EL%20Haggar%20S.M.-Egypt.pdf; (b) Department of Economic and Social Affairs (DESA), “Small-scale production and use of liquid biofuels in sub-Saharan Africa: Perspectives for sustainable development” (2007), which is available at: www.un.org/esa/sustdev/csd/csd15/documents/csd15_bp2.pdf; (c) Wetlands International, “Biofuels in Africa: An assessment of risks and benefits for African wetlands” (May 2008), which is available at: http://www.aidenvironment.org/Upload/Files/xhtvkw/Biofuels%20in%20Africa_study%20WI.pdf; (d) European Commission, Directorate-General for Research, Information and Communication Unit, “Energy scientific and technological indicators and references” (2005), which is available at: http://europa.eu.int/comm/research/rtdinfo/index_en.html; (e) The Royal Society, “Sustainable biofuels: prospects and challenges” (14 January 2008), which is available at: <http://royalsociety.org/displaypagedoc.asp?id=28914>; (f) Free Patents Online, “Method and device for pelletizing unprocessed sugar-cane bagasse” (4 April 2007), which is available at: www.freepatentsonline.com/EP1770152.html; (g) V. Seebaluck, “Sugarcane bagasse cogeneration as a renewable energy resource for Southern Africa”, which was presented at the Third International Green Energy Conference (Västerås, Sweden, 17-21 June 2007) and is available at: http://www.carensa.net/PDF/Sugarcane%20Bagasse%20Cogeneration%20as%20a%20Renewable%20Energy%20Resource%20for%20Southern%20Africa_17Jun07.pdf; (h) International Society of Sugar Cane Technologists, “Design, build-up and evaluation of a sugarcane biomass (bagasse and trash) gasification pilot plant with 3 MWE of power” (June 2007), project proposal for the International Sugarcane Biomass Utilization Consortium (ISBUC), which is available at: <http://issct.intnet.mu/ISBUCresprop1.HTM>; and (i) P.W. Alonso, P. Garzone and G. Cornacchia, “Agro-industry sugarcane residues disposal: The trends of their conversion into energy carriers in Cuba”, *Waste Management*, vol. 27, No. 7 (2007), pp. 869-885.

G.L. Shukla and K.A. Prabhu, “Bio-gas production from sugarcane biomass and agro-industrial waste”, which is () available at: <http://www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=19960302970>.

K.L. Kadam, “Environmental life cycle implications of using bagasse-derived ethanol as a gasoline oxygenate in () Mumbai (Bombay)” (November 2000), which is available at: www.nrel.gov/docs/fy01osti/28705.pdf; M.I. Rajoka, “The enzymatic hydrolysis and fermentation of pretreated wheat straw and bagasse to ethanol”, *ATDF Journal*, vol. 2, No. 2 (2005), which is available at: www.atdforum.org/IMG/pdf/ethanol.pdf; and A. Hinkova and Z. Bubnik, “Sugar beet as a raw material for bioethanol production”, *Czech J. Food Science*, vol. 19, No. 6 (2001), pp. 224-234, which is available at: [www.cazv.cz/ attachments/5-Hinkova.pdf](http://www.cazv.cz/attachments/5-Hinkova.pdf).

DynaMotive Energy Systems Corporation, “Fast pyrolysis of bagasse to produce biooil fuel for power generation”, () which was presented at the 2001–Sugar Conference and is available at: www.biooil.ru/docs/2001SugarConferencePaper.pdf.

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A. Sayegh, "Middle East poultry production sees reasons for optimism", *World Poultry*, vol. 32, No. 4 (2007) : _____
<http://faostat.fao.org> :

A.M. al-Majali et al., "Risk factors associated with camel brucellosis in Jordan", *Tropical*

C.R. 'A.S. Saber, "The camel in ancient Egypt" (1998) '*Animal Health and Production*, vol. 40, No. 3 (April 2008), pp. 193-200

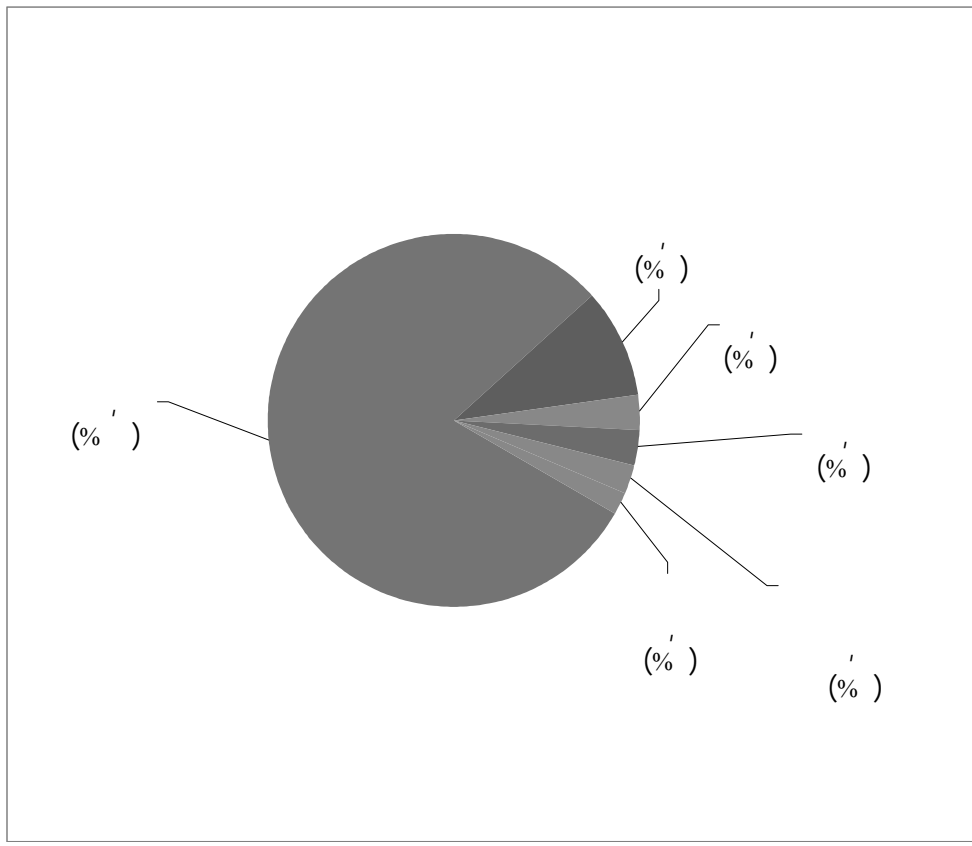
T.W. Widodo and A. 'Engler et al., "Economics and environmental impact of biogas production as a manure management strategy"

C.D. Fulhage, D. Sievers and J.R. 'Hendriadi, "Development of biogas processing for small scale cattle farm in Indonesia" (2005)

U. Wernery, 'H.O. Wu et al., "Biogas – is it a sustainable energy source?" (2001) 'Fischer, "Generating methane gas from manure"
 "FMD and camelids: International relevance of current research".

(..) : _____

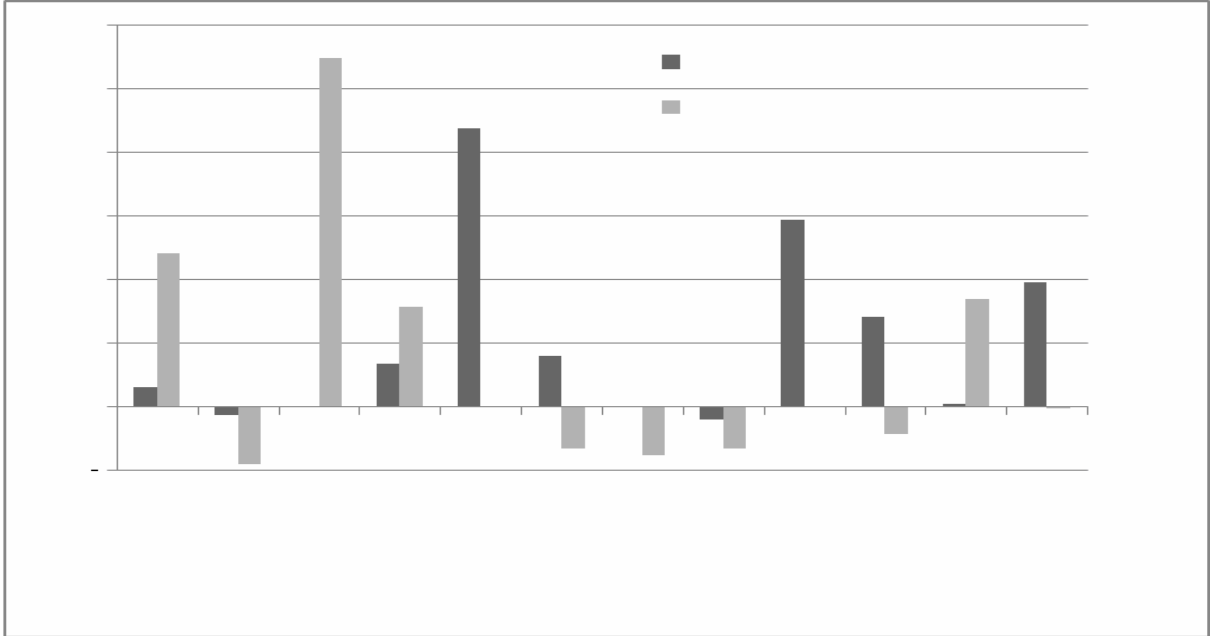
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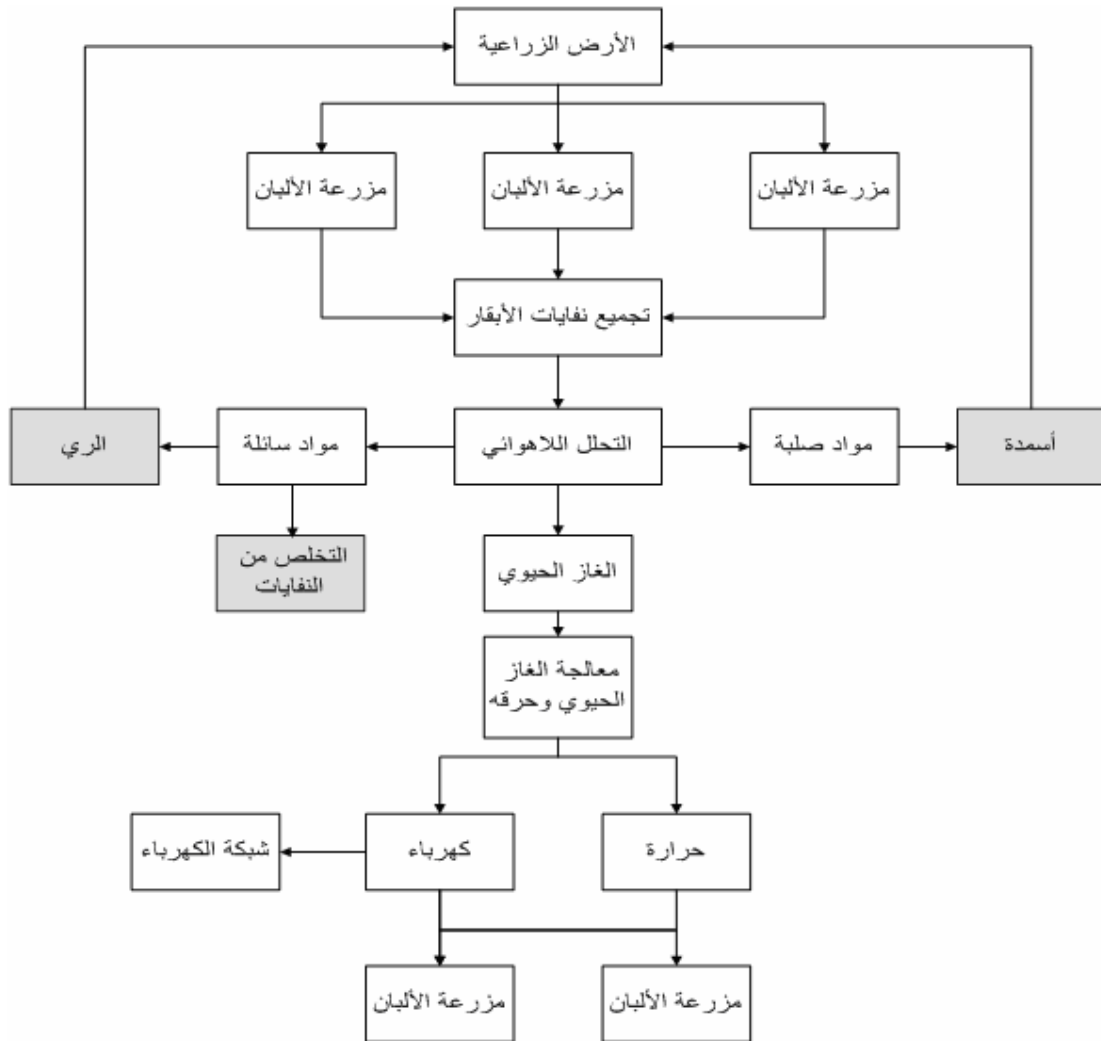
See the following: (a) IMES Consulting, "GCC dairy products 2006 Oman", which is available at: () <http://www.imesconsulting.com/publications.php?gclid=CNPYqNfevZkCFRKlxwodMm4-dQ>; (b) X. Zhang, R.L. Kilmer and A. Muhammad, "A descriptive analysis of Egypt and Saudi Arabia who import United States dairy products" (2003), which is available at: <http://ideas.repec.org/b/ags/uflomo/15698.html>; (c) United States Agency for International Development (USAID), "The dairy market in Iraq" (9 July 2006), which is available at: www.usaid.gov/iraq/contracts/pdf/TheDiaryMarketinIraq.pdf; (d) Palestinian Central Bureau of Statistics, which is available at: http://www.pcbs.gov.ps/Portals/_pcbs/Agriculture/8bd96c73-6cf5-47b7-af30-66a6624fc018.htm; (e) Hashemite Kingdom of Jordan, Department of Statistics (DOS), which is available at: http://www.dos.gov.jo/agr/agr_a/index.htm; and (f) A.M. al-Majali et al., "Risk factors associated with camel brucellosis in Jordan", *Tropical Animal Health and Production*, vol. 40, No. 3 (April 2008), pp.193-200, which is available at: <http://www.springerlink.com/content/v57tr0j6010744k8/>.



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C.D. Fulhage, D. Sievers and J.R. Fischer, "Generating methane gas from manure", which is available at: _____
<http://www.wcasfmra.org/biogas.htm>.

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H.O. Wu et al., "Biogas – is it a sustainable energy source?" (2001), which is available at: _____
<http://www.environmentalstudies.au.dk/publica/f2001hx-biogas.pdf>.

T.W. Widodo and A. Hendriadi, "Development of biogas processing for small scale cattle farm in Indonesia" (2005), ()
 which is available at: <http://www.wcasfmra.org/biogas.htm>.

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C.D. Fulhage, D. Sievers and J.R. Fischer, "Generating methane gas from manure", which is available at : _____
<http://www.wcasfmra.org/biogas.htm>

- ()
- ()
- ()
- ()
- (●)
- ()

G. Rive, "Utilization of renewable energy sources and energy-saving technologies by small-case milk plants and () collection centres" (1992), which is available at: <http://www.fao.org/docrep/004/t0515e/T0515E03.htm>

D.B. Fankhauser, "Cheese making illustrated" (July 2000), which is available at: http://biology.clc.uc.edu/fankhauser/Cheese/Cheese_5_gallons/CHEESE_5gal_00.htm ()

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						(Noblehurst Farms, Inc)
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P. Wright and J. Ma, "Anaerobic digester at Noblehurst Farms, Inc.: Case Study" (2003); P. Wright and K. Graf, : _____
 "Anaerobic digester at AA dairy: Case Study" (2003); C. Nelson and J. Lamb, "Final report: Haubenschild Farms Anaerobic
 Digestion" (The Minnesota Project, 2002); and P. Wright and J. Ma, "Fixed film digester at Farber Dairy Farm: Case Study" (2003).

(..) : _____

/ / / / / /

(/)					
					Liban Lait

H. Thaker, "Almarai Company cash cow: Falcom Equity Research Report" (30 December 2008); Al-Safi-Danone, see : _____ "Record breakers", which is available at: www.euroasiaindustry.com/assets/uploads/117.pdf; Al Rawabi Dairy Company LLC, which is available at: http://www.tradekey.com/profile_view/uid/1223003/Al-Rawabi-Dairy-Company-LLC.htm; and J. Qadir, "Al Rawabi opens new Dh50m plant", *Khaleej Times* (23 October 2003).

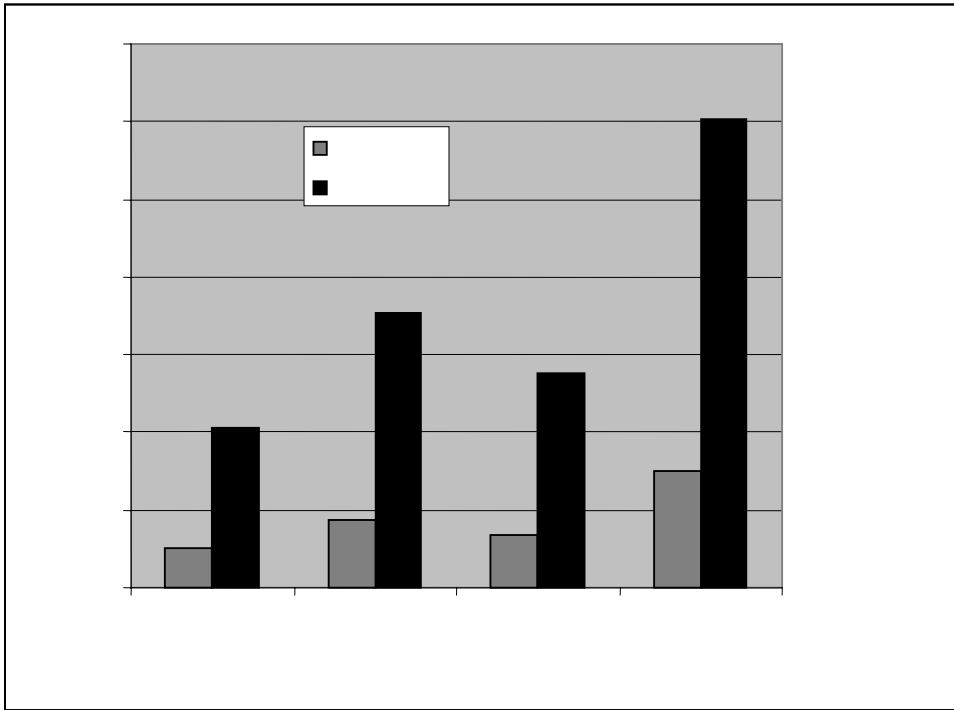
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C.R. Engler et al., "Economics and environmental impact of biogas production as a manure management strategy", which is : _____ available at: www.agmrc.org/media/cms/Engler2_F05E9EA9371B6.pdf.

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C.R. Engler et al., "Economics and environmental impact of biogas production as a manure management strategy", which is available at: www.agmrc.org/media/cms/Engler2_F05E9EA9371B6.pdf.

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C.D. Fulhage, D. Sievers and J.R. Fischer, "Generating methane gas from manure", which is available at: <http://www.wcasfmra.org/biogas.htm>; and P.E. Wright, "Anaerobic digestion and wetland treatment case study: Comparing two manure odour control systems for dairy farms" (1998), which is available at: www.rcminternationalllc.com/RCM_Forms/RCM_Paper_No_984105.pdf.

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[.groups/public/documents/ARADO/UNPAN020869.pdf](http://groups/public/documents/ARADO/UNPAN020869.pdf)

[.www.najah.edu/researches/313.pdf](http://www.najah.edu/researches/313.pdf) :

[.http://www.pcbs.gov.ps](http://www.pcbs.gov.ps) :

<http://server.egypt.com/egypt/egydirectory/> :

[.detail/2620/nag-hamady-for-wood-production-and-fabrication-co.html](http://server.egypt.com/egypt/egydirectory/detail/2620/nag-hamady-for-wood-production-and-fabrication-co.html)

<http://www.srfo.org/newsdetail.asp?> :

[.ID=29&ln=ar](http://www.srfo.org/newsdetail.asp?ID=29&ln=ar)

http://www.dos.gov.jo/agr/agr_a/:

[.index.htm](http://www.dos.gov.jo/agr/agr_a/index.htm)

<http://www.cdsi.gov.sa/> :

[.showsection.aspx?lid=26&id=318](http://www.cdsi.gov.sa/showsection.aspx?lid=26&id=318)

[.www.gom.com.eg/algomhuria/2005/06/06/stock/detail04.shtml](http://www.gom.com.eg/algomhuria/2005/06/06/stock/detail04.shtml) :

<http://www.cso-yemen.org/content.php?lng=english> :

[.&id=443](http://www.cso-yemen.org/content.php?lng=english&id=443)

- -
-
- Adam + partner. 2009. "Low cost retort kiln called 'adam-retort' or ICPS (Improved Charcoal Production System)". Available at: <http://www.biocoal.org/3.html>.
- Ahmed, W.O. 1997. "Briquettes in Sudan", No. 39. Available at: <http://www.hedon.info/BriquettesInSudan>.
- Al Rawabi Dairy Company LLC. Available at: http://www.tradekey.com/profile_view/uid/1223003/Al-Rawabi-Dairy-Company-LLC.htm.
- Al-Tawil, W. 2001. Syrian Arab Republic. CIHEAM-Option Méditerranéennes. Available at: <http://ressources.ciheam.org/om/pdf/b35/02002227.pdf>.
- Alam, A. "Growing sugar crops for food, feed and fuel", presented at International Conference on World Prospects of Sugar Crops as Sources of Food and Energy Suppliers (Luxor, Egypt, 1-4 March 2009). GL 2.3/1.
- Alam, S.A. 2006. "Use of biomass fuels in the brick-making industries of Sudan: Implications for deforestation and greenhouse emission" (Department of Forest Ecology, University of Helsinki, Finland. Available at: <https://oa.doria.fi/handle/10024/3159>.
- Algomhuria. Available at: www.gom.com.eg/algomhuria/2005/06/06/stock/detail04.shtml.
- Alonso P.W., Garzone, P. and Cornacchia, G. 2007. "Agro-industry sugarcane residues disposal: The trends of their conversion into energy carriers in Cuba", *Waste Management*, vol. 27, No. 7, pp. 869-885.
- Al-Safi-Danone. Record Breakers. Available at: www.euroasiaindustry.com/assets/uploads/117.pdf.
- Al-Widyan, M.I., Tashtoush, G., Hamasha, A.M. 2006. Combustion and emissions of pulverized olive cake in tube furnace. Science Direct. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S0196890405001998> (last accessed on 24 February 2009).
- Al-Majali, A.M., Al-Qudah, K.M., Al-Tarazi, Y.H. et al. 2008. "Risk factors associated with camel brucellosis in Jordan", *Tropical Animal Health and Production*, vol. 40, No. 3, pp. 193-200. Available at: <http://www.springerlink.com/content/v57tr0j6010744k8/>.
- Aqeel, A.M., Hameed, K.M. 2007. "Implementation of olive mill by products in agriculture", *World Journal of Agricultural Sciences*, vol. 3, No. 3, pp. 380-385. Available at: [www.idosi.org/wjas/wjas3\(3\)/18.pdf](http://www.idosi.org/wjas/wjas3(3)/18.pdf).
- Aqra, F., Yaghi, N., Subuh, Y. et al. 2009. "Reducing the environmental impact of olive mill wastewater", *American Journal of Environmental Science*, vol. 5, No. 1. Available at: <http://www.scipub.org/fulltext/ajes/ajes511-6.pdf>.
- Arab Organization for Agricultural Development. 2007. Strategy for Sustainable Arab Agricultural Development for the Upcoming Two Decades (2005-2025).
- Atayol, A.A. 2003. "Anaerobic co-treatability of olive mill wastewaters and domestic wastewater" (Izmir Institute of Technology, Izmir, Turkey). Available at: <http://library.iyte.edu.tr/tezler/master/cevremuh/T000239.pdf>.

- Babu, S.P. 2006. Perspectives on Biomass Gasification. IEA Bioenergy Agreement. Available at: <http://media.godashboard.com/gti/IEA/IEAWS1Report5-06rev%5B1%5D7-07.pdf>.
- Bailey, Jr. R., Colombo, M. and Scott, W.N. "A 4 MWe biogas engine fueled by the gasification of the production of olive oil wastes (sansa)". Available at: <http://www.brdisolutions.com/pdfs/bcota/abstracts/9/25.pdf>.
- Basin. 1999. "Utilization of Bagasse in brickmaking: R & D in Sudan", *Wall Building Technical Brief* (Advisory Service and Information Network).
- Biomass Energy Resource Center. 2007. Wood Pellet Heating. Available at: www.mass.gov/Eoca/docs/doer/pub_info/doer_pellet_guidebook.pdf.
- BMA info 2004. "Optimization of COSUMAR's beet sugar factories".
- Central Department of Statistics and Information of Saudi Arabia. Available at: <http://www.cdsi.gov.sa/showsection.aspx?lid=26&id=318>.
- Central Intelligence Agency (CIA). *The World Factbook*. Available at: <https://www.cia.gov/library/publications/the-world-factbook/>.
- Central Statistical Organization. Available at: <http://www.cso-yemen.org/content.php?lng=english&id=443>.
- Commission on Sustainable Development. 2009. "Policy options and practical measures to expedite implementation in agriculture, rural development, land, drought, desertification and Africa", (advanced unedited text, 19 May), p. 12.
- Council of Arab Ministers Responsible for the Environment (CAMRE). 2007. "The Arab Ministerial Declaration on Climate Change". The Declaration, which was adopted by CAMRE at its nineteenth session (5- 6 December 2007), reflects the Arab position in dealing with climate change issues.
- The Declaration of the High-Level Conference on World Food Security: The Challenges of Climate Change and Bioenergy (Rome, 3-5 June 2008), p. 3 under medium and long-term measures.
- Delta Sugar Company. Available at: www.deltasugar.com.
- DynaMotive Energy Systems Corporation. "Fast pyrolysis of bagasse to produce biooil fuel for power generation", which was presented at the 2001–Sugar Conference. Available at: www.biooil.ru/docs/2001SugarConferencePaper.pdf.
- Egyptian Sugar and Integrated Industries Company (ESIIC) and Qena Newsprint Paper Factory. Interviews with officials.
- El Ashmawy, K.H. et al. 2007. "Socioeconomic and environmental aspects of women labor in the Egyptian agricultural sector: Case study of sugar crops", *American-Eurasian Journal of Agriculture and Environment Science*, vol. 2, No. 3, pp. 255-260. Available at: [www.idosi.org/aejaes/jaes2\(3\)/8.pdf](http://www.idosi.org/aejaes/jaes2(3)/8.pdf).
- El Habbab, M.S. "Introducing organic farming system in olive production and linking small farmers to markets". Available at: http://www.egfar.org/egfar/lfm/gphi_documents/04_Regional_Case_Studies_2008/01_AARINENA/Introducing_Organic_Farming_System_in_Olive_Production-Part-%20B.doc.

- -
- El Haggag, S.M. et al. 2005. “Environmentally balanced industrial complex for the cane sugar industry in Egypt”, which was presented at Proceedings International Hydrogen Energy Congress and Exhibition IHEC 2005 (Istanbul, Turkey, 13-15 July). Available at: www.unido-ichet.org/ihec2005/files/manuscripts/EL%20Haggag%20S.M-Egypt.pdf.
- Energy Crop Digestion Plant Strem. “Sun – Crops – Bio-Energy”. Available at: www.ica-biogas.net/Dokumente/casestudies/strem.pdf.
- Engler, C.R., Jordan, E.R., McFarland, M.J. and Lacewell, R.D. Economic and Environmental Impact of Biogas Production as a Manure Management Strategy. Available at: www.agmrc.org/media/cms/Engler2_F05E9EA9371B6.pdf.
- ESCWA. 2005. “Technology transfer to small and medium-sized enterprises and identifying opportunities for domestic and foreign direct investment in selected sectors: The case of SME clusters in the agro-food and apparel industries” (E/ESCWA/SDPD/2005/6), pp. 22-30.
- European Commission, Directorate-General for Research, Information and Communication Unit. 2005 “Energy scientific and technological indicators and references”. Available at: http://europa.eu.int/comm/research/rtdinfo/index_en.html.
- European Community Contribution Agreement with an International Organization. 2003. “Integrated waste management for the olive oil pressing industries in Lebanon, Syria and Jordan”. Available at: <http://www.undp-jordan.org/Portals/0/OO per cent20PD per cent201.pdf>.
- Food and Agriculture Organization. Industrial charcoal production. 2008. Development of a sustainable charcoal industry. Available at: http://www.drveniugljen.hr/assets/files/pdf/FAO_Industrial%20charcoal%20production.pdf.
- FAO. *The State of Food Insecurity in the World*, 2008. Available at: <http://www.fao.org/docrep/011/i0291e/i0291e00.htm>.
- FAO statistics. Available at: www.faostat.org.
- Fokaides, P.A., Tsiftes, K. 2007. “Utilisation of Olive Husk in energy sector in Cyprus”. Proceedings of the Renewable Energy Sources & Energy Efficiency Conference (28-30 September 2007, Nicosia, Cyprus) p. 7.
- Four Seasons Fuel Ltd. 2009. “Charcoal retort”. Available at: <http://www.fourseasonsfuel.co.uk/charcoal-retorts.asp>.
- Fankhauser, D.B. 2000. “Cheese making illustrated”. Available at: http://biology.clc.uc.edu/fankhauser/Cheese/Cheese_5_gallons/CHEESE_5gal_00.htm.
- Free Patents Online. 2007. “Method and device for pelletizing unprocessed sugar-cane bagasse”. Available at: www.freepatentsonline.com/EP1770152.html.
- Frost, P., Gilkinson, S. and Buick, J. 2006. “The potential of on-farm anaerobic digestion for Northern Ireland”. Available at: www.actionrenewables.org/site/download.asp?CatID=4972&parentid=4879&FILE=anaerobic_digestion.pdf.

- -
- Fulhage, C.D., Sievers, D. and Fischer, J.R. “Generating methane gas from manure”. Available at: <http://www.wcasfmra.org/biogas.htm>.
- General Organization for Sugar. Available at: www.gofs.org/.
- Ghazal, M. and Namrouqa, H. 2007. “Jordan: Pilot plant to treat olive vegetable water”, *Jordan Times*. Available at: <https://www.zawya.com/printstory.cfm?storyid=ZAWYA20070701032653&l=032600070701>.
- Hadjipanayiotou, M. et al. 1993. “Feeding ensiled poultry excreta to ruminant animals in Syria”, *Livestock Research for Rural Development*, vol. 5, No. 1. Available at: www.fao.org/ag/agap/frg/lrrd/lrrd5/1/syrial.htm.
- Hassan, H.K. “Arab region prospects of sugar crops as sources of food and energy”, which was presented at the International Conference on World Prospects of Sugar Crops as Sources of Food and Energy Suppliers (Luxor, Egypt, 1-4 March 2009).
- Haussier, B. “Quena: Successful start-up of the world’s most modern bagasse paper mill”. Available at: www.voithpaper.com/media/vp_tw12_quena_en.pdf.
- Hibajene, S.H., Kalumiana, O.S. 2003. “Manual for charcoal production in earth kilns in Zambia”. Department of energy, Ministry of Energy and Water development Lusaka, Zambia. Available at: <http://www.bioquest.se/reports/Charcoal%20production%20manual%20ENGLISH.pdf>.
- Hinkova, A. and Bubnik, Z. 2001. “Sugar beet as a raw material for bioethanol production”, *Czech J. Food Science*, vol. 19, No. 6, pp. 224-234. Available at: www.cazv.cz/attachments/5-Hinkova.pdf.
- “How products are made: Charcoal briquettes”. 2009. Available at: <http://www.madehow.com/Volume-4/Charcoal-Briquette.html>.
- International Atomic Energy Agency (IAEA). Energy and Environmental Data Reference Bank. Available at: www.iaea.org/inisnkm/nkm/aws/eedrb/data/JO-enc.html.
- International Fund for Agricultural Development (IFAD). Approved projects for Lebanon. Available at: http://www.ifad.org/operations/projects/regions/PN/LB_all.htm.
- IMES Consulting. “GCC dairy products 2006 Oman”. Available at: <http://www.imesconsulting.com/publications.php?gclid=CNPYqNfevZkCFRKIxwodMm4-dQ>.
- The Independent. 2007. Somalis Yearn for Islamic Rulers to Return and Tame the Warlords. Available at: www.independent.co.uk.
- Index Mundi. Available at: www.indexmundi.com/agriculture/?country.
- International Society of Sugar Cane Technologists. 2007. “Design, build-up and evaluation of a sugarcane biomass (bagasse and trash) gasification pilot plant with 3 MWE of power”, project proposal for the International Sugarcane Biomass Utilization Consortium (ISBUC). Available at: <http://issct.intnet.mu/ISBUCresprop1.HTM>.
- Iraq Private Sector Growth and Employment Generation (IZDIHAR). 2006. The Dairy Market in Iraq. USAID/IRAQ. Available at: www.usaid.gov/iraq/contracts/pdf/TheDiaryMarketinIraq.pdf.

- Jordan, Department of Statistics. Available at: http://www.dos.gov.jo/agr/agr_a/index.htm.
- Kadam, K.L. 2000. "Environmental life cycle implications of using bagasse-derived ethanol as a gasoline oxygenate in Mumbai (Bombay)". NREL/TP-580-28705. Available at: www.nrel.gov/docs/fy01osti/28705.pdf.
- Kannan, D. "Renewable energy in developing countries with an emphasis on India", which was presented at the International Student Festival in Trondheim 2009. Available at: http://folk.ntnu.no/kannan/renewable_energy_isfit09_presentation.pdf.
- L.S. Gold and Associates. 2004. "AK-Chin Indian community biomass feasibility study". Available at: http://apps1.eere.energy.gov/tribalenergy/pdfs/31_ak_chin_biomass.pdf.
- League of Arab States. "Proposed executive programme to follow up on mandates of the Arab Economic, Developmental and Social Summit in the area of the environment" (in Arabic), which was submitted to CAMRE at their ad-hoc session (24-25 May 2009).
- Liban Lait. Available at: <http://www.libanlait.com/Templates/InternalTemplate.aspx?PostingId=204>.
- Lusk, P., Wheeler, P. and Rivard, C. 1996. Deploying anaerobic digesters: Current status and future possibilities. Available at: http://www.osti.gov/energycitations/product.biblio.jsp?query_id=1&page=0&osti_id=481517.
- Management of Resources and Environment Solutions (MORES). Available at: <http://www.mores.com.lb/>.
- Ministry of Economy and Trade in Lebanon. 2006. "Integrated assessment of the Lebanon-EU Association Agreement: A pilot study on the Lebanese olive oil sector". Available at: www.economy.gov.lb/NR/rdonlyres/6BD2EE6D-81D5-49E6-894A-1E1A931BCAAC/0/ExecutivesummaryUNEP28February.pdf.
- Nag Hamady for Wood production and Fabrication. Available at: <http://server.egypt.com/egypt/egydirectory/detail/2620/nag-hamady-for-wood-production-and-fabrication-co.html>.
- NationMaster. Available at: www.nationmaster.com.
- Nelson, C. and Lamb, J. 2002. "Final report: Haubenschild Farms Anaerobic Digestion" (The Minnesota Project, 2002). Available at: www.mnproject.org/pdf/Haubyrptupdated.pdf.
- Niaounakis, M. and Halvadakis, C.P. 2006. *Olive processing waste management: Literature review and patent survey*, vol. 5, second edition.
- OPEC Fund for International Development (OFID). 2009. "Biofuels and food security".
- The Olive Oil Source. "Disposal of olive processing by-products". Available at: www.oliveoilsource.com.
- "Olive seeds as biomass" (in Arabic). Available at: <http://www.srfo.org/newsdetail.asp?ID=29&ln=ar>.
- Omer, A.M. 2005. "Biomass energy potential and future prospect in Sudan", *Renewable and Sustainable Energy Reviews*, vol. 9, pp. 1-27.
- Omer, A.M. 2007. "Organic waste treatment for power production and energy supply", *Journal of Cell and Animal Biology*, vol. 1, No. 2, pp. 034-047.

- OPET Sweden. The multipurpose bioenergy in Skellefteå – Electricity, heating and pellets. Available at: www.aster.it/opet/doc/sweden_bioenergy_plant.pdf.
- Organisation for Economic Co-operation and Development (OECD). 2008. “Biofuel support policies: An economic assessment”.
- Pal, R.C. and Singh, V.K. “Charcoal making technology for livelihood for rural people”, TERI New Delhi. Available at: www.fuelnetwork.org/index.php?option=com_docman&task=doc_download&gid=207.
- Palestinian Central Bureau of Statistics. Available at: http://www.pcbs.gov.ps/Portals/_pcbs/Agriculture/8bd96c73-6cf5-47b7-af30-66a6624fc018.htm.
- Pari, G. et al. 2004. “Charcoal production for carbon sequestration”. Available at: <http://project.jica.go.jp/indonesia/006504510/archives/pdf/output3.pdf>.
- Peters M. et al. 2002. *Plant Design and Economics for Chemical Engineers*, fifth edition. McGraw-Hill.
- “Probiogas, Promotion of biogas for electricity and heat Production in EU countries – Economics and environmental benefits of biogas from centralised co-digestion”. 2007. Project coordinator: University of Southern Denmark, Bioenergy Department. Available at: <http://web.sdu.dk/bio/probiogas/down/leaflet.pdf>.
- Qadir, J. 2003. “Al Rawabi opens new Dh50m plant”, *Khaleej Times*. Available at: <https://www.zawya.com/story.cfm?id=ZAWYA20031023072858>.
- Rajoka, M.I. 2005. “The enzymatic hydrolysis and fermentation of pretreated wheat straw and bagasse to ethanol”, *ATDF Journal*, vol. 2, No. 2. Available at: www.atdforum.org/IMG/pdf/ethanol.pdf.
- Rive, G. 1992. “Utilization of renewable energy sources and energy-saving technologies by small-case milk plants and collection centres”. FAO Corporate Document Repository. Available at: <http://www.fao.org/docrep/004/t0515e/T0515E03.htm>.
- Rouilly, A., Jorda, J., Rigal, L. 2006. “Thermo-mechanical processing of sugar beet pulp. I. Twin screw extrusion process”, *Carbohydrate Polymers*, vol. 66, pp. 81-87.
- The Royal Society. 2008. “Sustainable biofuels: prospects and challenges”. Available at: <http://royalsociety.org/displaypagedoc.asp?id=28914>.
- Saber, A.S. 1998. *The Camel in Ancient Egypt*.
- Salibi, A. 2007. “Marketing study for olive, olive oil and apple in Lebanon”. Available at: <http://www.agriculture.gov.lb/Studies/Baseline%20study%20for%20Apple%20and%20Olive%20June%202007-GTFS-REM-070-ITA.pdf>. Accessed 20-2-09.
- Samani, Z., Hanson, A., Smith, G. et al. 2008. Anaerobic digestion of municipal solid waste and agricultural waste and the effect of co-digestion with dairy cow manure. *ScienceDirect, Bioresource Technology*, vol. 99, No. 17, pp. 8288-8293. Available at: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V24-4SH7DRD-1&_user=808330&_rdoc=1&_fmt=&_orig=search&_sort=d&_view=c&_acct=C000044179&_version=1&_urlVersion=0&_userid=808330&md5=30851d03c1a320383d7ff6d937628af4.

- Santucci, F.M. 2007. "Organic agriculture and olive oil production in the southern Mediterranean countries". OLIBIO Research Project. Available at: http://orgprints.org/13528/01/Santucci-OA_in_the_Med.pdf.
- Sawahel, W. 2009. "Sudan sets its sights on biofuels". Science and Development Network. Available at: <http://www.scidev.net/>.
- Sayegh, A. 2007. "Middle East poultry production sees reasons for optimism", *World Poultry*, vol. 32, No. 4. Available at: <http://www.worldpoultry.net/article-database/middle-east-poultry-production-sees-reasons-for-optimism-id1954.html>.
- Seebaluck V. "Sugarcane bagasse cogeneration as a renewable energy resource for Southern Africa", Presentation to the third International Green Energy Conference, 17-21 June 2007, Västerås Sweden. Available at: <http://www.carensa.net/publications.htm>.
- Sfeir, J.P. President of Solarnet. Interview conducted by ESCWA on 4 February 2009, Beirut, Lebanon.
- Shaheen, H. "Management of olive mills wastes in the Palestinians territories" (in Arabic). Available at: <http://unpan1.un.org/intradoc/groups/public/documents/ARADO/UNPAN020869.pdf>.
- Shaheen, H., Abdel Karim, R. 2007. "Management of olive-mills wastewater in Palestine". An-Najah National University, J. Res. (N. Sc.) vol. 21. Available at: www.najah.edu/researches/313.pdf.
- Shukla, G.L., Prabhu, K.A. "Bio-gas production from sugarcane biomass and agro-industrial waste". Available at: <http://www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=19960302970>.
- Siemons R.V. 1993 "Carbonization of fresh bagasse". Available at: www.cleanfuels.nl/Projects%20&%20publications/Bagasse%20Carbo&agglomeration.pdf.
- Southern Minnesota Sugar Cooperative. "Facts about sugar beets and beet sugar". Available at: <http://www.sbreb.org/brochures/SugarCoop/>.
- Sugar Engineers. "Sugar Factories of North and West Africa". Available at: www.sugartech.co.za/factories/list.php.
- Sugar Worker, News from the Sugar Sector, July-August 2005. Available at: www.iuf.org/cgi-bin/dbman/db.cgi?db=default&uid=default&ID=2277&view_records=1&en=1.
- Summit Communications. 2009. "Sweet taste of success". Available at: www.summitreports.com/sudan/sugar.htm.
- TDC-Olive. "By-product reusing from olive and olive oil production". Available at: <http://www.biomatnet.org/publications/1859bp.pdf>.
- Thaker, H. 2008. "Almarai Company cash cow: Falcom Equity Research Report". Available at: www.moneyworks.ae/user_files/uploads/Almarai%20Company%20Dec%202008.pdf.
- Travis G-R. 2007. "An overview of sugar culture in Morocco, particularly within a Berber community in Rastabouda" (thesis). Available at: www.ir.canterbury.ac.nz/bitstream/10092/1448/1/thesis_fulltext.pdf.

- Tsiftes, K., Fokaides, P.A. 2007. "Utilization of olive husk in energy sector in Cyprus", *Renewable Energy Sources & Energy Efficiency*, which is available at: www.tekes.fi/eu/fin/partnerinhaku/energia_tiedostot/Fokaides_cypros.pdf.
- United Nations Department of Economic and Social Affairs (DESA). 2007. "Small-scale production and use of liquid biofuels in sub-Saharan Africa: Perspectives for sustainable development". Available at: www.un.org/esa/sustdev/csd/csd15/documents/csd15_bp2.pdf.
- United Nations Framework Convention on Climate Change (UNFCCC). 2006. "Clean Development Mechanism Project Design". Available at: www.cdm.unfccc.int/Panels/ssc_wg/SSCWG08_repan15_Revisions_PDD_form.pdf.
- United Nations data. Available at: www.data.un.org.
- United States Department of Agriculture (USDA). "USDA national agriculture statistics services – quick stats". Available at: www.nass.usda.gov.
- USDA Foreign Agricultural Service. 2009. "Syria: Trade Policy Monitoring – Annual 2009". Available at: <http://www.fas.usda.gov/gainfiles/200903/146337511.pdf>.
- Weima. 2009. "High performance briquetting system for volume reduction". Available at: <http://www.bestmachinery.hu/pdf/weima-th-400-e.pdf>.
- Wernery, U. "FMD and camelids: International relevance of current research".
- Westlake, M. 2003. "Economics of main sub-sectors in Syrian agriculture". Available at: <http://www.fao.org/docrep/006/Y4890E/y4890e0e.htm>.
- Wetlands International. 2008. "Biofuels in Africa: An assessment of risks and benefits for African wetlands". Available at: http://www.aidenvironment.org/Upload/Files/xhtvkw/Biofuels%20in%20Africa_study%20WI.pdf.
- Widodo, T.W. and Hendriadi, A. 2005. "Development of biogas processing for small scale cattle farm in Indonesia". International Seminar on Biogas Technology for Poverty reduction and Sustainable Development. Available at: <http://www.wcasfmra.org/biogas.htm>.
- World Report International Ltd. "Miracle of sugar in the desert". Available at: www.worldreport-ind.com/sudan/sugar.htm.
- Wright, L., Boundy, B., Perlack, B. et al. 2006. Biomass Energy Data Book. Edition 1. Available at: <http://www.osti.gov/bridge/purl.cover.jsp;jsessionid=1DC1D4FABA57FC32092F2CD5C189B30E?purl=/930823-9gRAKe/>.
- Wright, P. and Graf, K. 2003. "Anaerobic digester at AA Dairy: Case Study". Manure Management Program, Department of Biological and Environmental Engineering, Cornell University. Available at: <http://files.harc.edu/Sites/GulfCoastCHP/CaseStudies/AnaerobicDigesterAADairy.pdf>.
- Wright, P. and Ma, J. 2003. "Anaerobic digester at Noblehurst Farms, Inc.: Case Study". Manure Management Program, Department of Biological and Environmental Engineering, Cornell University. Available at: <http://files.harc.edu/Sites/GulfCoastCHP/CaseStudies/AnaerobicDigesterNoblehurst.pdf>.

- Wright, P. and Ma, J. 2003. "Fixed film digester at Farber Dairy Farm: Case Study". Manure Management Program, Department of Biological and Environmental Engineering, Cornell University. Available at: [www.manuremanagement.cornell.edu/Docs/Farber%20Case%20Study%2011-23-04\(NEW\).pdf](http://www.manuremanagement.cornell.edu/Docs/Farber%20Case%20Study%2011-23-04(NEW).pdf).
- Wright, P.E. 1998. "Anaerobic digestion and wetland treatment case study: Comparing two manure odour control systems for dairy farms". Available at: www.rcminternationalllc.com/RCM_Forms/RCM_Paper_No_984105.pdf.
- Wu, H.O. et al. 2001. "Biogas – is it a sustainable energy source?" Available at: <http://www.environmentalstudies.au.dk/publica/f2001hx-biogas.pdf>.
- Zawya. 2007. "Syria industry: National sugar company's Jandar plant set to start production sugar". Available at: <http://www.zawya.com/countries/sy/macrowatch.cfm?eiusection=NATIONAL%20SUGAR%20COMPANY'S%20JANDAR%20PLANT%20SET%20TO%20START%20PRODUCTION>.
- Zhang, X., Kilmer, R.L. and Muhammad, A. 2003. "A descriptive analysis of Egypt and Saudi Arabia who import United States dairy products". International Agricultural Trade and Policy Center. Available at: <http://ideas.repec.org/b/ags/uflomo/15698.html>.