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- [22] Silalertruksa, T. and Gheewala, S.H. 2011. The environmental and socio-economic impacts of bio-ethanol production in Thailand, *Energy Procedia*, 9, 35-43.
- [23] Khatiwada, D. and Silveira, S. 2009. Net energy balance of molasses based ethanol: The case of Nepal, *Renew. Sustain. Energy Rev.*, 13, 2515-2524.
- [24] Luo, L., Voet, E.V.D. and Huppes, G. 2009. Life cycle assessment and life cycle costing of bioethanol from sugarcane in Brazil, *Renew. Sustain. Energy Rev.*, 13, 1613-1619.
- [25] Losordo Z. et al. 2016. Cost competitive second- generation ethanol production from hemicellulose in a Brazilian sugarcane biorefinery, *Biofuels, Bioprod. Biorefining*, 10, 589-602.
- [26] Arshad, M., Abbas, M. and Iqbal, M. 2019. Environmental Technology & Innovation Ethanol production from molasses: Environmental and socioeconomic prospects in Pakistan: Feasibility and economic analysis, *Environ. Technol. Innov.*, 14, doi.org/10.1016/j.eti.2019.100317.
- [27] Gopal, A.R. and Kammen, D.M. 2009. Molasses for ethanol: the economic and environmental impacts of a new pathway for the lifecycle greenhouse gas analysis of sugarcane ethanol, *Environ. Res. Lett.*, 4(4), doi:10.1088/1748-9326/4/4/044005.
- [28] Silalertruksa, T., Gheewala, S.H. and Pongpat, P. 2015. Sustainability assessment of sugarcane biorefinery and molasses ethanol production in Thailand using eco-efficiency indicator, *Appl. Energy*, 160, 603-609.
- [29] Khan, M.T., Khan, I.A. and Yasmeen, S. 2019. Sugarcane biofuels and bioenergy production in Pakistan: current scenario, potential and future avenues. In: Khan, M.T., Khan, I.A., and Yasmeen, S. (eds): Khan and Khan, *Sugarcane Biofuels* (pp. 175-202). Switzerland: Springer.
- [30] Kayani, J. 2018. *Pakistan Sugar Mills Association (PSMA) - Annual report 2018*, Pakistan Sugar Mill Association, Islamabad, Pakistan.
- [31] Mahmood, F., Kamal, M. and Baig, A. 2014. *Pakistan Energy Vision 2035*, Sustainable Development Policy Institute (SDPI), Islamabad, Pakistan.
- [32] Wasti S.I. et al., Pakistan Economic Survey 2018-19, Ministry of Finance, Islamabad, Pakistan.
- [33] Arshad, M. 2011. Bioethanol: a sustainable and environment friendly solution for pakistan, *A Sci. J. COMSATS*, 16 & 17, 21-26.
- [34] Luo, L., Voet, E.V.D. and Huppes, G. 2009. Life cycle assessment and life cycle costing of bioethanol from sugarcane in Brazil, *Renew. Sustain. Energy Rev.*, 13, 1613-1619.
- [35] Nguyen, T.L.T., Gheewala, S.H. and Bonnet, S. 2008. Life cycle cost analysis of fuel ethanol produced from cassava in Thailand, *Int. J. Life Cycle Assess.*, 13(7), 564-573.
- [36] Yoosin, S. and Sorapipatana, C. 2007. A study of ethanol production cost for gasoline substitution in Thailand and its competitiveness, *Thammasat Int. J. Sc. Tech.*, 12(1), 69-80.
- [37] Rasmey, A.H., Hassan, H., Aboseidah, A. and Abdulwahid, O. 2018. Enhancing bioethanol productivity from sugarcane molasses by *saccharomyces cerevisiae* Y17 KP096551, *Egypt. J. Bot.*, 58(3), 547-561.
- [38] Prueksakorn, K., Gheewala, S.H., Sagisaka, M. and Kudoh, Y. 2014. Sugarcane biorefinery complex in thailand and a proposed method to cope with apportioning its environmental burdens to co-products, *J. Sustain. Energy Environ.*, 5, 95-103.
- [39] Swarr, T.E., Hunkeler, D., Klopffer, W., Pesonen, H.L., Citroth, A., Brent, A.C. and Pagan, R. 2011. *Environmental life cycle costing: A code of practice Society of Environmental Toxicology and Chemistry (SETAC)*, Pensacola (FL).
- [40] Shapouri, H. and Gallagher, P. 2005. *USDA's 2002 Ethanol Cost-of-Production Survey*, United States Department of Agriculture, USA.
- [41] Sorapipatana, C. and Yoosin, S. 2011. Life cycle cost of ethanol production from cassava in Thailand, *Renew. Sustain. Energy Rev.*, 15(2), 1343-1349.
- [42] Ghani, H.U. and Gheewala, S.H. 2018. Comparative life cycle assessment of byproducts from sugarcane industry in Pakistan based on biorefinery concept, *Biomass Conversion and Biorefinery*, 8, DOI: 10.1007/s13399-018-0345-3.
- [43] Garrett, D.E. 1989. *Chemical Engineering Economics Van Nostrand Reinhold*, 1<sup>st</sup> Ed., New york.
- [44] Arshad, M., Abbas, M. and Iqbal, M. 2019. Ethanol production from molasses: Environmental and socioeconomic prospects in Pakistan: Feasibility and economic analysis, *Environ. Technol. Innov.*, 14, doi.org/10.1016/j.eti.2019.100317.
- [45] Piccolo, C. and Bezzo, F. 2009. A techno-economic comparison between two technologies for bioethanol production from lignocellulose, *Biomass and Bioenergy*, 33(3), 478-491.
- [46] Litterman, M., Eidman, V. and Jens-en, H. 1978. *Economics of Gasohol*, St. Paul, Minnesota.
- [47] Poppe, M.K. and Cortez, L.A.B. 2012. *Sustainability of sugarcane bioenergy - Updated Edition*, Center for Strategic Studies and Management (CGEE), Brazil.