

ABSTRACT

Sugar industry can play a vital role for co-generation of power for national grid from its by-product named as bagasse; history shows many agricultural countries are aware with the potential of this sector and using it potentially for co-generation of power by sugar for the national grid. Initially they faced some impediments but they did not remain for long period of time and vanished due to interest of policy makers and government efforts. They resolved them according to their situation and capacity.

Pakistan is facing energy shortfall, which has adverse impact on economy and development of country. Pakistan is agricultural country and it has potential to produce around 3000 MW of power by sugar industry. It is an option to co-generate power and utilize the potential properly to overcome the energy shortfall in somehow. But, some impediments are not permitting to do so. (Co-generation policy 2008).

To know the impediments and how they are resolved, a research is designed for carrying out research on four sugar mills i.e Ansari (A), Bawany (B), Army (C) and Khoski (D), of Badin district as a case study. A semi structured questionnaire is designed and interviews conducted from managers of four sugar mills about potential of mills regarding by-products, their proper usage, impediments for not utilizing the bagasse for co-generation of power for national grid and about specification of mills. A survey questionnaire is designed and sent to the managers and other related persons regarding the objects, some statistical data is obtained from questionnaire, a multiple regression tests is applied, because the relationship between one dependent and more than two independent factors is developed.

Heavy investment, variability of sources, informational issues, technological backwardness, regulatory and policy problems, financing impediments, non-interest of regulatory authorities, tariff and taxes, transmission and infrastructure issues, interest of employees are impediments facing by sugar mills of Badin for co-generation. On the basis of tests the most influential impediments are: heavy investment, variability of sources, technological backwardness and regulatory and policy problems, which hinder the co-generation of power by sugar industry, so extra efforts are required to overcome impediments and take advantage of potential to providing energy security to country.