Abstracts of Additional Renewable Energy Session Papers

Impact of Agricultural Renewables on China's Energy Supplies

Ding-Lai Tao
Hsi-Chun Hsu
Chinese Academy of Agricultural Engineering Research and Planning
South Beijing, China

China has depended on agricultural materials as sources of energy for many years. These sources, together with wind power, water power, and solar energy, have formed a self-sufficient energy system in the countryside.

Accompanying the progress is agricultural modernization, petroleum products and artificial fertilizers have become increasingly important agricultural inputs. Simultaneous soil depletion and losses, due to the burning off of crop residuals, have become so serious that the energy equilibrium is threatened. Therefore, a new system must be established through the application of new technology. Improvement in household furnaces, development of more efficient biogas and solar energy facilities, expansion of fuel forests, and advances in wind and water power utilization (including small hydroelectric plants) are all measures of supreme importance. Integration of these various energy resources, with one supplementing the other, will provide optimum results and ultimately alleviate the country's dependency on commercial energy supplies. This is one of the most urgent problems facing Chinese agricultural engineers today.