

TECHNICAL BULLETIN

46

FUEL GAS AND MANURE

BY

**ANAEROBIC FERMENTATION
OF ORGANIC MATERIALS**

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

Preparation
of
FUEL GAS AND MANURE
by Anaerobic Fermentation of Organic Materials

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INTRODUCTION

FUEL GAS has been successfully produced from organic refuse materials not only in India but in other countries such as U.S.A., France and Germany. The production of fuel gas and manure by anaerobic fermentation of cattle-dung and other farm-wastes has attracted considerable attention in this country, as this method promises to provide a means for overcoming the present wasteful practice of burning cattle-dung in the form of dry cakes for fuel. It is estimated that nearly half of the total cattle-dung produced in the country is burnt away due to the scarcity of alternative sources of fuel and this means loss of a valuable material which otherwise could provide additional 200 million tons of farmyard manure for improving the soil fertility and crop production. To convince the farmer of the practical usefulness of the method of anaerobic fermentation in obtaining the fuel value of his refuse material without impairing its manurial constituents, it is necessary that a simple equipment be devised which could be set up at a low cost in village homes by the villager himself, be operated at little expense and could produce enough combustible gas to meet the fuel requirements of an average household.