

A project to use paddy straw to produce compressed bio gas can transform the rural economy of India. Discuss (200 words)

### Introduction

Setting up of the Bio-energy power plants is significant to the India's target of NDC, which includes 2 main targets in promoting renewable energy: (i) Increasing renewable energy capacity to 600 GW by 2030. (ii) meeting 50% of energy requirements from renewables.

### Compressed bio gas:

Bio-gas is produced from bio-mass sources like agriculture residue, cattle dung, municipal solid waste etc. After purification, it is compressed and called Compressed Bio gas.

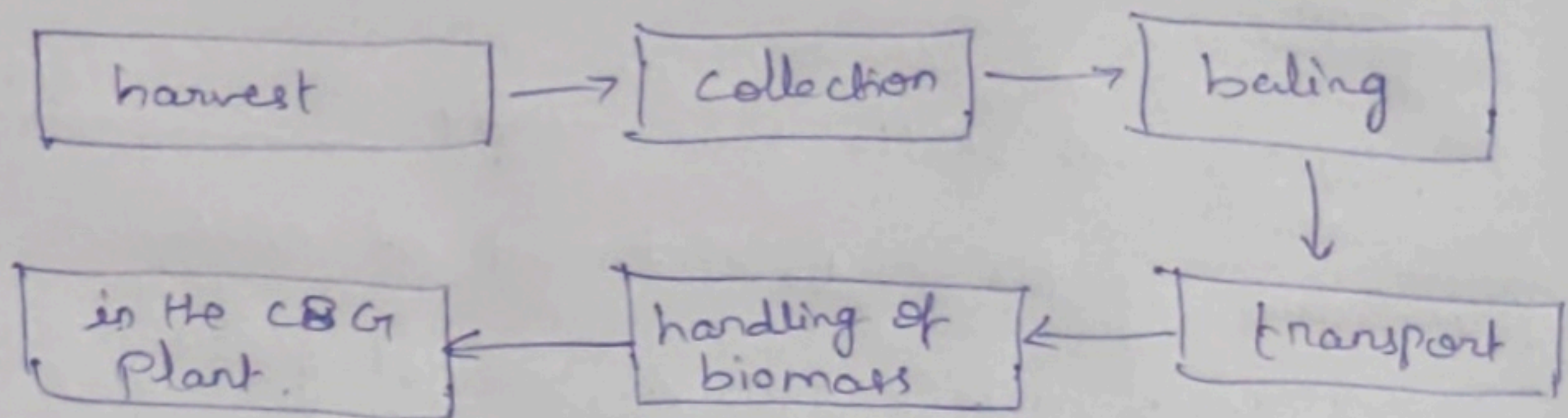
In following ways, compressed bio gas, <sup>Power plant</sup> can benefit the rural economy of India:

#### 1) Farmers:

- can earn through monitization of paddy straws
- e.g) as per FAO study, farmer can earn ₹500 to ₹1500 per-ton of rice straw.
- farmers can use this credit for the next crop season.  $\Rightarrow$  Supplement the farmers' income.

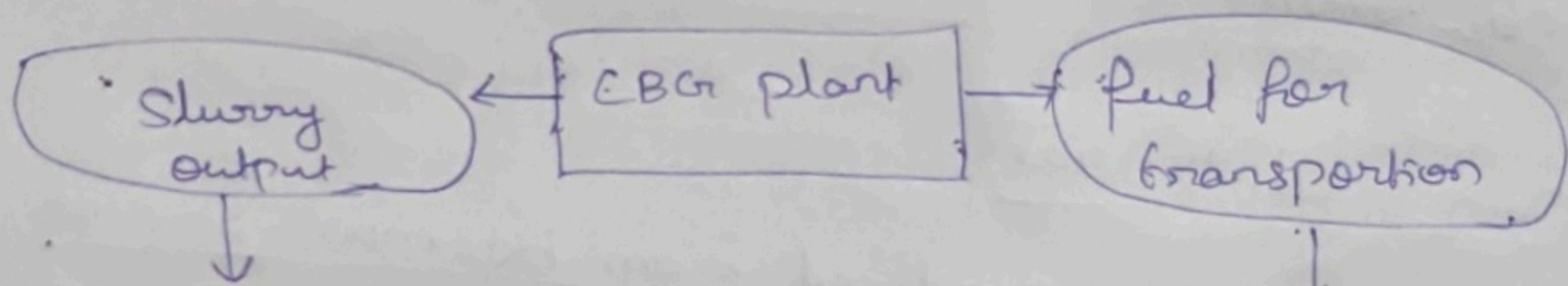
## 2) Employment generation

— employment opportunities to rural youth in the large value chain of this process.



## 3) CBG power plant

— Double benefit



fermented organic manure as compost to replenish soils.

₹46 per kg valued.

## 4) Government

— 5% of CBG production target as per

"Sustainable Alternative Towards Affordable

Transportation" - SATAT can be set.

— India's NDC target to UNFCCC can be met in long term.

## 5) Real-~~time~~ examples - investment

— 1st bio-energy plant of a private company in Punjab.  $\Rightarrow$  huge investment from foreign.

## Conclusion:

Setting up of the Bio-power plants is an ideal

Example of 'wealth from waste' approach and

Circular economy. We must not forget that

role played by Bio-power plants in reducing

CO<sub>2</sub> emissions and preventing stubble burning.