

## Agriculture waste- as a resource

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### Abstract

The agriculture is the oldest occupation in India as well as in the world. The agriculture is one of the primary occupation which supports secondary as well as tertiary sector. Agriculture which supports the growth of industries and some industries which are considered as agro-based industries, who depend on agriculture for raw materials like cotton for textile industry, tobacco for cigarette etc. The agriculture which supports the secondary as well as service sector, but still it only supports 35% of the national income. According to one survey, more than 58% of the Indians are still depend on agriculture in India for their livelihood. But one thing we should remember that, agriculture is having many reasons for its backwardness. The waste created by agriculture is also a major problem which is a major problem before the farmers. But if we use agriculture waste, as a resource, then surely it will be boon to, our farmers and also supports our economic system. According to one survey, more than 20% of the agricultural produce is destroyed by rats. If we take the precautionary measures to preserve agricultural produce, and taking steps to convert agricultural waste into resource, then many problems relating to agriculture will be solved. In this paper, I want to discuss the issues relating to converting the agricultural waste into resource, which is useful for our reformers.

**Keywords:** Agriculture, waste, resource, management, livestock etc.



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## **INTRODUCTION**

Nowadays, the waste management is a burning issue as well as global problem before the world. We are facing problem relating to disposal of the waste just like, nuclear waste, e-waste, and another important issue is relating to conversion of agricultural waste into a resource[1].

If we properly manage the agricultural waste management, then it would be a resource in the agricultural sector. There are so many things relating to the agricultural waste including the waste from the agricultural crops, waste seeds, seedlings, including the cow dung which is from the animal waste, is still considered as the agricultural waste, because it is the integral part of our agricultural system[2].

But if we judiciously, manage the agricultural waste management, and then definitely it will supports our economic system[3].

### **Research methodology;-**

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### **A Methodology for Sustainable Management of Food Waste**

- Guillermo Garcia-Garcia,
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- James Colwill,
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Methodology

### **Research Aim and Structure**

The decision as to which is the most beneficial waste management alternative to utilize to manage food waste is usually made considering fundamentally only economic reasons and availability of waste management facilities. Furthermore, legislation delimits the range of solutions applicable to manage different types of food waste and therefore the decision is often made considering only a few alternatives[4]. This paper seeks to add environmental and social considerations to the decision-making process so that more sustainable solutions can be achieved from the range of feasible waste management options[5]. With this aim, the structure of the research presented in this paper is as follows: firstly, the definition of food waste used throughout this paper is provided; secondly, previous categorizations of food waste are

discussed; thirdly, a categorization process is described based on the most pertinent indicators to classify food wastes; fourthly, the different types of food waste identified are linked to their most appropriate waste management alternatives, building a Food Waste Management Decision Tree; and finally, the categorization process is illustrated with two case studies from the UK food industry[6]. A visual model of the research approach used can be seen in Fig.

S. No.	Type of waste (Bulking Material)	Earthworm	Duration	Results	References
1	Buffalo waste, sheep waste, goat waste, cow waste		90 days	Maximum earthworm growth rate was achieved in the various combinations of buffalo dung and minimum growth rate in sheep waste. TOC content and C/N ratio decreased during vermicomposting, whereas total nutrient content increased.	Sharma and Garg [3]
2	Rice straw + paper waste + cow dung	<i>E. fetida</i>	105 days	Paper waste and rice straw effectively convert into nutrient-rich vermicompost. Vermicompost is more fragmented than parent feedstocks. Use of rice straw in higher ratio was not recommended.	Sharma and Garg [4]
3	Salvinia molesta	<i>E. fetida</i>	45 days	Chemical compounds responsible for weed allelopathic effects destroyed completely. The C/N ratio of Salvinia was reduced sharply from 53.9 to 9.35.	Hussain et al. [56]
4	Sewage sludge (cattle dung)	<i>E. fetida</i>	80 days	Vermicomposting modifies the structure of bacterial community in the waste and reduces the pathogenic human bacteria population.	

  

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**Causes of the agricultural waste;**-There are so many causes for the waste created in agriculture.

**Destroying by natural calamities;**- Most of the time the agricultural waste is created by the natural calamities like earthquake, destroying by rats etc. According to one survey, nearly 20% of the agricultural production is destroyed by rats etc[8].

**Shifting cultivation system;**- In some places, the shifting cultivation system was in practice. According to this system, after the cultivation, the whole land is burnt after the harvesting. At this juncture, sometime the people left the place remaining agricultural produce[9].

**The waste from domesticated animals;**-The waste from the animals like cow, buffalo, sheep, goat is also considered as the agricultural waste because, the domesticated animals are also the integral part of the agriculture[10].

**The waste from the poultry;**- The waste from the hen and cock is also considered as the agricultural waste. These live stocks are the integral part of the agriculture



**Importance of the agricultural waste;**- The agricultural waste is not like nuclear waste, e-waste, because it is related to fertility of the soil. If we taking necessary actions, then we can convert the agricultural waste into the valuable resource[11].

After harvesting, some time some amount of food grains, seeds, seedlings, which are mixed with the soil it converts into organic matter. If we use mix this decomposed organic matter with the earthworm, then it leads to fertility of the soil. It can be called as ‘‘ humus’’ which is rich in fertility[12].

The animal waste, which is called as ‘‘ cow dung’’ which can be mixed with earthworm, is also leads to the increase in fertility in the soil. The cow dung cake is used as a fuel still in villages. The cow dung which includes nitrogen, prosperous and potassium, which is the best organic manure for the plants. The urine of cow is used in the preparation of the phenyl and as well as used in the preparation of herbs [13].

Bio gas which is prepared by cow dung is an alternative fuel in terms of wood is best way to prevent the cutting trees. The cow dung cakes are used in performs the yajnas, to spread positive vibration. The cow dung cakes are also used in the preparation of ‘‘ Vibhuthi’’ which is used by certain religious community.

The organic manure which is prepared by cow dung is having international demand is exported to foreign countries by our Indian companies.

The decomposed waste from poultry which also leads to increase in the fertility of the soil.

If there is highest production of fruits, then it can be used as to make the health drinks, tomato jam, juice etc and it can be used in the food processing unit [14].

**Effects of the agricultural wastage as a resource;**-By converting the agricultural waste into a resource, we can prevent deforestation, increase our export and and control the pollution and also enhance the soil conservation. BY applying the agricultural waste which includes the cow dung also a best organic fertilizer and by this we can have the rich fertile soil.

The organic fertilizer which is includes in agric cultural waste, is can be use in place of chemical fertilizer like urea, and by this, we can prevent in depending on the chemical fertilizer and also decrease in the import of chemical fertilizer from the foreign countries. In India the cow slaughter is prohibited by the constitution itself, and by using this organic manure, we can make good foreign exchange.



**CONCLUSION;**- The conversion of the agricultural waste , as a resource is a best concept before the present world, which is used to increase the foreign exchange, increasing in fertility of the soil, used in the food processing unit, and to prevent deforestation also.

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