UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE
DEPARTMNET OF AGRICULTURAL EXTENSION
CoA, GKVK, BENGALURU-560 065

Name : KAVYASHREE C
Class : III Ph.D.
ID.No. : PALB 8027

Date : 19-12-2020
Time : 9:30 AM
Venue : Dr**.** Dwarkinath hall

Seminar III

Waste to Wealth: Converting Burden into Blessing

Synopsis

Agriculture, along with its allied sectors, is the largest source of livelihood in India, which is also a largest sector for waste generation (350 MT). Waste (or wastes) something which are unwanted or unusable materials which is discarded after primary use, or is worthless, defective and of no use. In same line agricultural waste are the non-product outputs of production and processing of agricultural products that may contain material that can benefit man but whose economic values are less than the cost of collection, transportation, and processing for beneficial use. Agricultural wastes can be in the form of solid, liquid or slurries depending on the nature of agricultural activities. It is important to view 'waste' as a valuable 'resource 'that can be converted into a variety of useful products. This process of conversion of waste to a product that can be put to primary use can be viewed as a process of generating wealth. Hence the phrase 'Waste to Wealth'.

998 million tonnes (MT) of agricultural waste is generated worldwide. Out of all the waste generated from agriculture, food loss is the major loss which occurs right from farm to fork. The loss which occur after harvesting i.e., marketing and post-harvest loss is one of the sector need to be accounted. India produces 150 million tonnes of fruits and vegetables and 50 million tonnes of waste per annum. These waste can be witnessed in the Agriculture Produce Market Committee (APMCs) which were established by the government to streamline and regulate the sale and purchase of different types of agriculture and pisciculture produce from remote areas.

Waste-to-wealth has been used as the concept to address the environmental problem by changing the traditional view of waste as an end product to be disposed off. Given the magnitude of waste generated, innovative waste conversion processes can create micro-entrepreneurship fortuity on an enormous scale. Increasing opportunities for this enterprise can have assorted advantages. With this back ground a present seminar has conceptualised with the following objectives:

1. To know the concept of agro waste and its forms
2. To study on the food loss and waste and its management
3. To focus on the agricultural waste and techniques adopted by APMCs
4. To review the case studies on converting waste to wealth in agricultural sector.

Agricultural waste:

Agricultural wastes are defined as the residues from the growing and processing of raw agricultural products such as fruits, vegetables, meat, poultry, dairy products, and crops.

Agricultural Waste Management System (AWMS):

Defined as planned system in which all necessary components are installed and managed to control and use byproducts of agricultural production in a manner that sustains or enhances the quality of air, water, soil, plant, and animal resources.

Food waste:

UN Food and Agriculture Organization (FAO) defined food waste which includes any healthy or edible substance that instead of being destined for human consumption is wasted, lost, degraded, or consumed by parasites at every stage of the food supply chain.

Agricultural waste can be converted into different forms which are beneficial to reduce pollution and to provide wealth. Some methods can be Conversion of Agricultural Waste, Agricultural Waste Management, Generation of Agricultural Waste from Food Processing Industries, Generation of Agricultural Waste from Poultry Houses and Slaughterhouses, Generation of Energy from Agro-Waste, Value Addition.

Review studies:

Gowda *et. al*, (2012*)* in their project on Food wastage in Bangalore city measures for mitigation reported that in total 9515 tons of food is wasted per year from 531 marriage halls accounting for total 305.86 crore rupees is wasted by buffet and batch system of service. About four per cent of food is wasted by per plate system. The total quantity of food wasted without serving is around 4735 tons which is worth of Rs.140.15 crore.

Shrikant Tayade *et.al,* (2017) in their study reported that in management of vegetable waste in APMC of Maharashtra are managed by utilizing technologies to deal with 'waste to wealth'. Among those technologies Bioprocessing, in an improved way, where vegetable waste materials are utilized to produce the economical or commercial viable products i.e. biofuel, biogas & manure and also with other applications as effective solution of waste management without damage to environment.

Conclusion

Agro-waste is a valuable resource to generate wealth. Creation of wealth from agro-waste is a beneficial tool to reduce environmental pollution, to promote food security, to increase fiscal growth, to improve crop cultivation. We Can think of broader solution to make it happen in that case prevention solution and recovery(recycling) solution can give more stress. Along with concerning on primary agriculture cultivation, it is necessary to focus on secondary cultivation to generate more wealth from agro-waste. To formulate more wealth from agro-waste, establishments of small scale industries should be developed in rural and remote areas. Government should initiate more schemes and provides subsidy for farmers to encourage for adopting the process of agro-waste to wealth

References

NARAYANA GOWDA, K., SHIVANNA, H., MANDANNA, P. K., UMESH, K. B., VENKATAREDDY, T. N., NEENA JOSHI, ANANDA, T. N., SURESH, S. V. AND BALAKRISHNA, J., 2012, *Food wastage in Bangalore city measures for mitigation*. Univ. Agril. Sci., Bengaluru.

SHRIKANT TAYADE, D., ANANT MARATHE, B., VILAS SAPKAL, S., AND RAJIV SAPKAL, S., 2017, Sustainable Solution for Vegetable Waste Generated at District Agriculture Produce Marketing Centre, *International Advanced Research Journal in Science, Engineering and Technology.,3(4): 2393-8021.*