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Awareness of Corn Growers for Corn Husk Utilization in Textile Handicrafts

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ABSTRACT

Corn is a well-grown plant in India which provides the supply of food for human and animals. Usually only the eyes of corn are commercialized, whereby, the husks are burnt or left abundantly as a waste. Corn husk is an agro waste which poses a problem of its disposal. The study was framed to analyzed corn growers perception and knowledge about proper disposal of corn waste and its utilization for income generation This research explores the corn waste husk which will be processed as the raw material for the textile handicrafts products. This innovation is expected to support the sustainability of the environment as well as economy because the product is eco-friendly and it can generate a new income source of farmers.

Keywords : Corn husk, Agro waste, Disposal, Utilization, Handicraft, Farmer

INTRODUCTION

Corn or maize is the second-largest agricultural crop in the world and third most important food crop after rice and wheat in India. Maize is grown in two seasons, rainy (*Kharif*) and winter (*Rabi*). *Kharif* maize represent around 83% of maize area in India while rabi maize correspond to 17 % maize area. Cultivation of corn generates stover (stalk, leaves and husks) by-products that have been considered for a variety of uses. Corn husks are the part that cover and protect the ears of corn and it is the strongest part of the corn plant as its nature is to protect the seeds. Corn stover typically consists of about 50 per cent stalks, 23 per cent leaves, 15 per cent cobs and 14 per cent husk. The leafy outer shell of an ear of maize is referred to as corn husk. The cellulose content of corn husk is approximately 80-87 per cent and the lignin content of corn husks is approximately 6-8 %. Approximately 844 million tons of corn are produced each year worldwide, of which 69 per cent of the corn plant is wasted as agriculture waste. Usually, the waste of corn husk is discarded and burnt which increase an air pollution but on the other hand corn husk can be used in textile handicrafts. The products made from corn husks are biodegradable, do not cause harmful emission and can also became a new source of income for farmers and women.

METHODOLOGY

The present survey of corn growers was carried out in village areas of Kanpur. The data were collected through a survey of 40 randomly selected farmers in Kanpur Dehat (Daleep Nagar, Phanda, Anuppur, Maitha, Bhiti). A descriptive design was used. Data were collected, tabulated and analyzed. On the basis of data analysis, a pamphlet and booklet having guidelines for usage of corn growers were furnished.

RESULTS AND DISCUSSION

In survey, several questions were asked to the farmers who were growing corn regularly as source for

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their livelihood to know about their awareness regardingdisposal practices of corn crop waste andit's utilization for income generation etc.

Knowledge of pollution problem due to post harvest produce:

Farmers were asked about the pollution problem by careless disposal of agro-waste of corn crop.It can be observed from the Table 1 that maximum 75 per cent respondents knew that post harvest causes pollution if not disposed off with care while 25 per cent respondents did not know that corn post harvest causes any pollution.

Table 1 : Distribution of Respondents According to their Knowledge about Pollution Problem due to Post Harvest Produce (N=40)

Sr. No.	Knowledge of Pollution due to Post harvest produce	Frequency	%
1.	Yes	30	75
2.	No	10	25

It can be invisaged from the data presented in Fig. 1, that majority of respondents (65 %) disposed off the agro waste of corn crop with care while 30 per cent farmers properly utilize the corn crop waste. On the other hand 5 per cent farmers disposed of the post harvest produce carelessly.

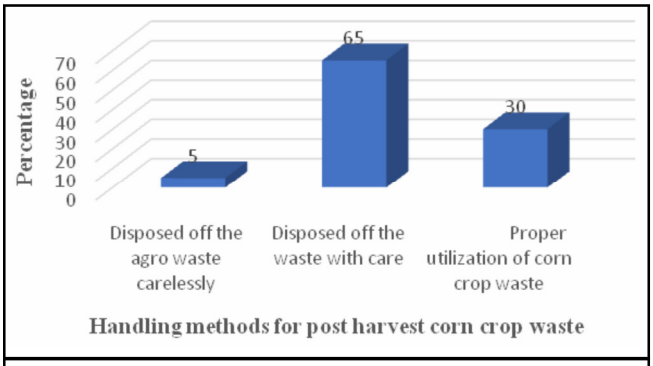

Fig. 1 : Disposal and Utilization of Corn husk

Methods for Disposal of Corn Crop Waste:

It is evident from the Table 2 that 57.7 per cent farmers were disposing the corn crop waste by converting it in to manure while 44.3 per cent by burning method.

Table 2 : Distribution of Respondents on the Basis Awareness of the Application and Disposing Methods of Corn Crop Waste (N= 26)

Sr. No.	Methods for disposal of corn crop waste	Frequency	%
1.	In Manure	15	57.7
2.	By Burning	11	42.3

Awareness of the Application and Utilization of AgroWaste of Corn Crop:

Data presented in Table 3 states that majority (58.33 %) of the farmers were using corn crop waste for animal food while 41.66 per cent used it for domestic purpose such as mats for sitting purpose and in some decorative household articles.

Table 3 : Distribution of Respondents on the basis of their Awareness about the Utilization Methods of Corn Crop Waste (N=12)

Sr. No.	Awareness about the utilization of corn crop waste	Frequency	%
1.	Domestic use	5	41.66
2.	Animal food	7	58.33

Knowledge about the Commercial Use ofCorn Husk:

It is observed from the Table 4 that majority (60 %) of the farmers did not know that the corn husk can also be used commercially while 40 per cent were having awareness of the commercial use of corn husk.

Table 4 : Distribution of Respondents on the basic of their Knowledge about the Commercial Use of Corn Husk (N=40)

Sr. No.	Corn husk can also be used commercially	Frequency	%
1.	Yes	16	40
2.	No	24	60

Interest in Utilization of corn crop waste:

Observations recorded in the Table 5 shows that majority (55 %) of farmers thought that corn husk can be reused and were very keen to utilize the corn waste in to useful products such as textile handicrafts to generate the income while 45 per cent farmers were totally unaware about corn husk utilization.

Table 5 : Distribution of the Respondent's basis of their Interest in Utilization of Corn Husk for Income Generation (N=40)

Sr. No.	Use of corn husk for income generation	Frequency	%
1.	Farmers were very keen to utilize the corn waste in to useful products	22	55
2.	Farmers were unaware about the reuse of corn crop waste	18	45

Interest in Training of Textile Handicrafts:

It is depicted from the Fig. 2 that maximum farmers (95 %) want to participate and showed interest in training related to textile handicraft designing with corn husk and only 5 per cent farmers did not taking any interest to participate in such type of training.

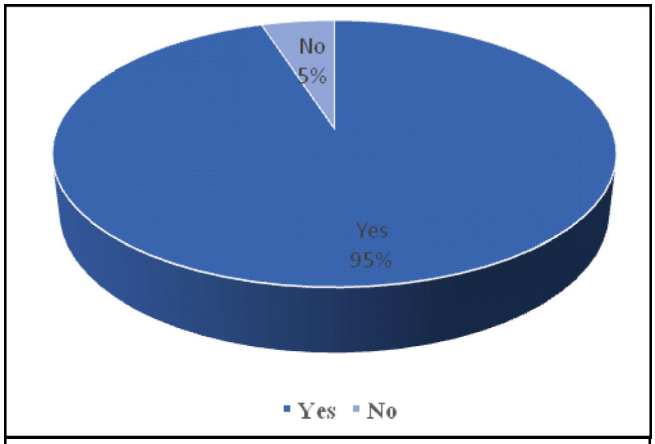

Fig. 2 : Interest in training of extile handicrafts

Conclusion:

Traditional agricultural methods are frequently used by farmers to grow corn crop in rural areas, which results in significant agro waste generation. The farmers are not more aware about the application of corn crop waste but they might generate extra income resources by turning this waste into handicraft items. Fibers can be extracted from corn husks and corn husk strips can be cut and utilized in making baskets, mats, coasters and ornamental objects which are natural, renewable and bio-degradable. These products do not cause harmful emissions during production, service life and after disposal.

Consequently, such initiatives can improve the economic stability of farming households, promote sustainable practices, and preserve traditional crafts, contributing to a more resilient and diversified rural economy.

REFERENCES

Diderot, Denis (December 15, 2011). "Maize"of Diderot & d'Alembert - Collaborative Translation Project. Retrieved April 1, 2015.

Harshita Chaudhary, M.S. Parmar, Navneet Kaur, 2013, Corn husk fibre for production of green fabrics, Fibre2fashion

Wild Fibres - Natural fibres for spinning & felting, Teresinha at Wild Fibres Studio I-319, Scott House, The Custard Factory

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