

PRIME MINISTER'S OFFICE

**South Block,
New Delhi - 110 011**

Please find enclosed, for action as appropriate, copy of a self-explanatory letter dated 12.09.2019 received in this office from Indinon-Indian Nonwoven Fabric Manufacturer Association, Ahmedabad.



**(Ajit Kumar)
Deputy Secretary
Tel. 2301 7367**

19/9
JS [nk]

Secretary, Ministry of Environment, Forests & Climate Change

PMO ID No. 5125948/2019-ES-2

Dated: 17.09.2019

I/ 3705502/2019

INDINON - INDIAN
NONWOVEN MANUFACTURE
ASSOCIATION OF INDIA
AHMEDABAD.

DATE: 12/09/2019

TO,

SH. HARDIK BHAI SHAH
HONORABLE DEPUTY SECRETARY
PMO, NEW DELHI

SUBJECT:- Representation from Indinon
Association.

Respected Sir,

Herewith, we would like
to represent ourselves as manufacturers
of PP. spun bond Nonwoven fabrics
manufacturers and Nonwoven Bags
manufacturers.

We are in support of our PM's
mission against single use plastic.

Kindly find enclosed herewith
our presentation and samples of our
product - Nonwoven Bags, which is best
and appropriate substitute of single use plastic
at this stage.
Thanking you.

Regards

~~Shub~~

President
Indinon.

M-9824606250

Yash

Secretary
Hemil Patel (GOT)
02-0009945099

Office Bearer

President

SURESH PATEL
98246 04730

Secretary


HEMIL PATEL
90999 45099


Treasurer

SHAILABH DIDWANIA
9825014781

IndiNON

INDINON Manufacturer Association of Nonwovens

 www.indinon.org.in

 secretary@indinon.org.in

PRESENTATION

FROM

INDINON- INDIAN

NONWOVEN FABRIC

MANUFACTURER

ASSOCIATION,

AHMEDABAD

Receipt No : 233781/2019/SECY OFFICE-MOEFCC

Subject: **Swachh Bharat Abhiyan (Suggested Policy for Non-Woven Carry Bag With having minimum thickness of 250 microns & above may be permitted)** Date: 09/19/19 11:14 AM
From: RAJAN KOHLI <director@aonenonwoven.com>
To: secy-moef@nic.in

NONWOVEN PRESENTATION.docx (1.5MB) Suggestion.docx (19kB)

Respected Sir,

Good Morning

Soft reminder on our below mail, we request you to please consider our suggestion for non woven carry bags and looking forward positive response from your end.

Best Regards

Rajan Kohli

From: RAJAN KOHLI [mailto:director@aonenonwoven.com]

Sent: Tuesday, August 20, 2019 4:31 PM

To: 'secy-moef@nic.in'

Subject: Swachh Bharat Abhiyan (Suggested Policy for Non-Woven Carry Bag With having minimum thickness of 250 microns & above may be permitted)

secy - 01/12/2019
JSLK

Respected Sir

Greetings !!!

I take this opportunity to introduce myself, RAJAN KOHLI (Non Resident Indian) engaged in manufacturing of NON WOVEN FABRIC (Technical Textile) under the name of:

M/S A ONE TEX TECH (PVT) LTD.

Plot number. 2046, Rai Industrial Area, Phase II

Dist. Sonapat (131001) Haryana

(www.aonenonwoven.com)

This project was started in 2013 (using German technology) of SPUNBOND NON WOVEN FABRIC. It was started keeping in mind that as plastic is more hazardous to environment; there has been an increase in demand for Non Woven Fabric in India. This phenomenon has been observed in other parts of the world like Europe, USA, Australia, and the Middle East.

We are enclosing a file with our suggestion which must be taken into consideration in terms of carry bags (with min. thickness of 250 microns and above)policy in India, which will be hailed by all government departments as it will lead to cleaner India, which helps our municipalities team to easy collection of waste.

Thank you for going through this document and hoping you will take swift action.

Best Regards

Rajan Kohli

MD (A-One Tex Tech Pvt Ltd.)



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INTRODUCTION TO NONWOVEN FABRIC AND NON WOVEN BAG

Non-woven Fabric is manufactured from fiber grade Polypropylene Granules by adopting the Spun Bond technology of Technical Textile. It is submitted that this technology is the latest textile technology and different from the traditional Weaving Technology.

Under this process, PP Granules are fed to the Hopper and at a certain temperature they are passed through the extruder and melted. After this, material is filtered and passed through the spinning unit to obtain a continuous single filament with the help of cool air, which is called polypropylene filament. The filaments are then subject to lying on the continuous web and under control pressure thermal bonding of filaments takes place and Fabric is formed which is called Polypropylene Nonwoven Fabric (Kind of Technical Textile).

NON WOVEN BAGS ARE MADE OF TEXTILE FABRIC AND NOT PLASTIC

Definitions of Non-woven fabric as per various organizations and experts :-

(A) As per ISO (International Organization for Standardization) 9092, nonwoven is defined as "manufactured sheet, web or batt of directionally or randomly oriented fibers, bonded by friction, and/or cohesion and/or adhesion, excluding paper and products which are woven, knitted, tufted, stitch-bonded incorporating binding yarns or filaments or felted by wet-milling, whether or not additionally needled. The fibers may be of natural or man-made origin. They may be staple or continuous filaments or be formed in situ.

The aforesaid definition of non-woven, given by ISO 9092, has been adapted by CEN (EN 29092), and consequently by DIN, AFNOR, and all standardization offices in the EU.

(B) ASTM (American Society for Testing Materials) prefers to define nonwoven as "a textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means, and combinations thereof. This definition is available in many ASTM standards including D 123, D 1117, D 2646, D 3786, D 3787, D 5684, D 5732, D 5733, D 5734, D 5735, and D 5736.

(C) The Ministry of Commerce and Industries- DGFT vide notification no 54/2015-2020 dated 15.01.2019 has notified Non Woven fabric and bags as Technical Textile. Moreover, Ministry of Textiles has classified Spun Bond Nonwoven fabric under the head Technical Textiles. Technical Textiles are textile materials and products, used for their technical performance and functional properties. Unlike conventional textiles used traditionally for clothing or furnishing, technical textiles are used basically on account of their specific physical and functional properties. They represent a multi-disciplinary field with numerous end user applications. This industry has penetrated major areas of economic activity: Clothtech, Geotech, Homotech, Aerospace, shipping, Sports, Agriculture, Defence, Medical, etc. Ministry has broadly grouped them into 12 segments viz: Agrotech, Buildtech, Indutech, Meditech, Mobiltech, Oekotech, Packtech, Protech and Sporttech.

(D) With the development of science and technology textile fabrics are not limited to as was earlier understood by the common man as fabric manufactured by weaving of Yarn from Natural fibers only. With the growth of population and advancement of technology, the fabric is started to be manufactured from Man-made fibers also which are popularly known as Polyester, Polypropylene, Terylene, Terene, Rayon, Nylon, Dacron, Nylex, etc.

Manufacturing Process flow chart of Spun bond Non-woven fabric

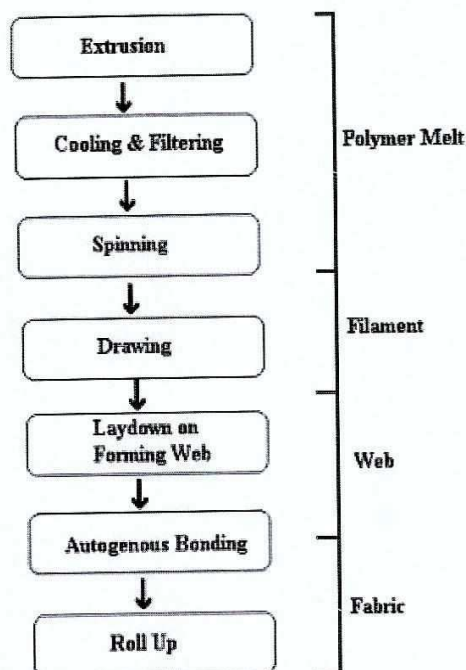
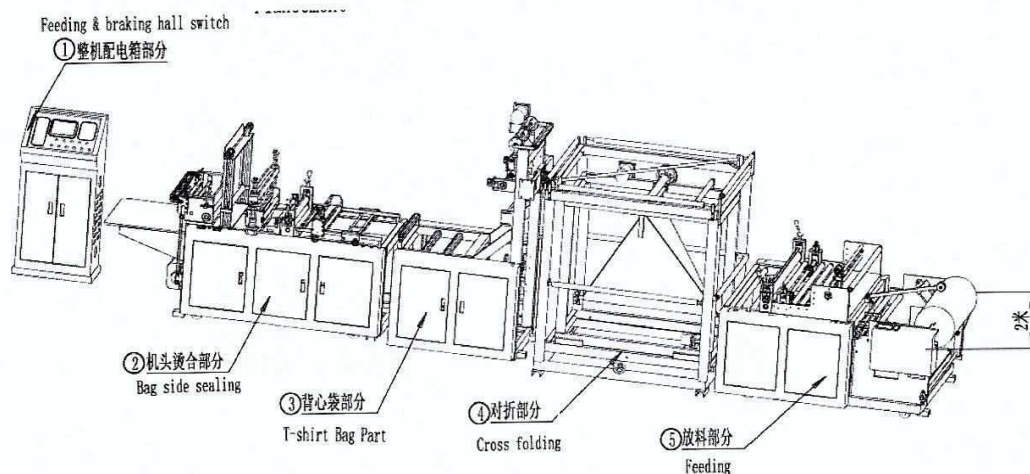


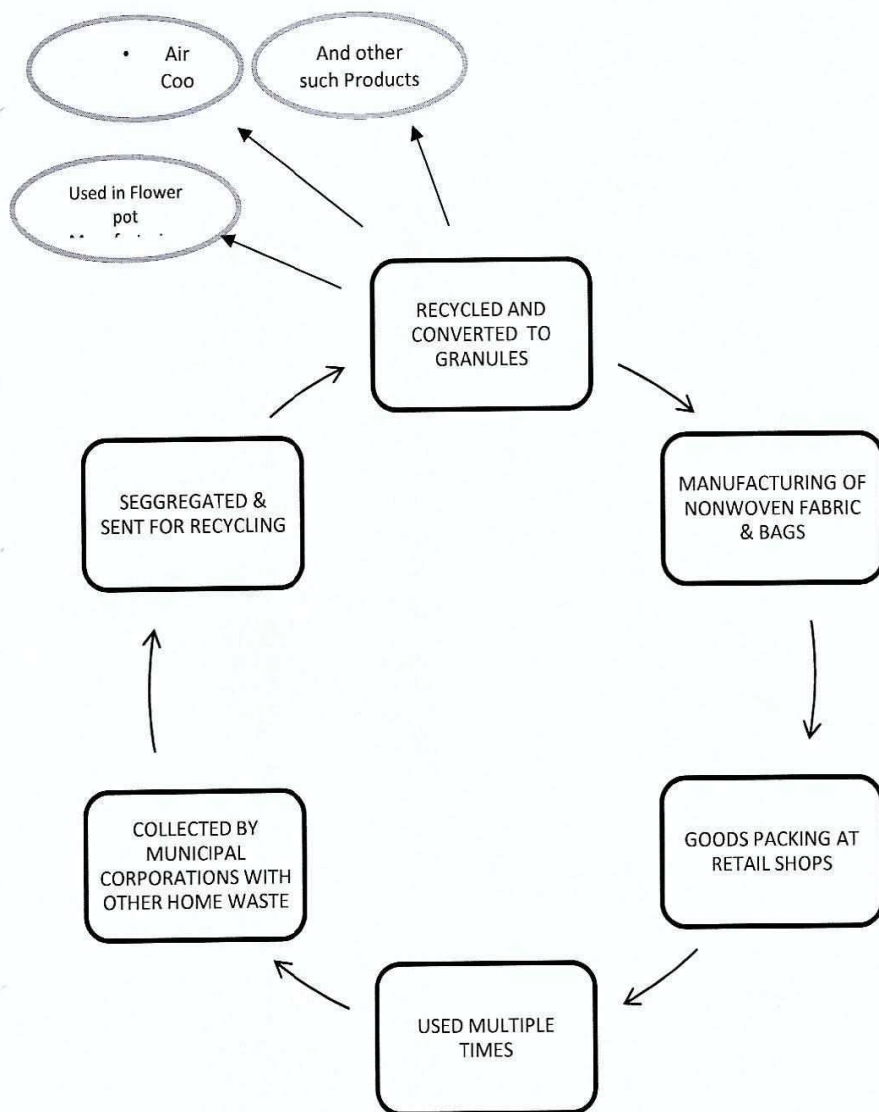
Fig. 1: Flowchart of spunbonding process [3]

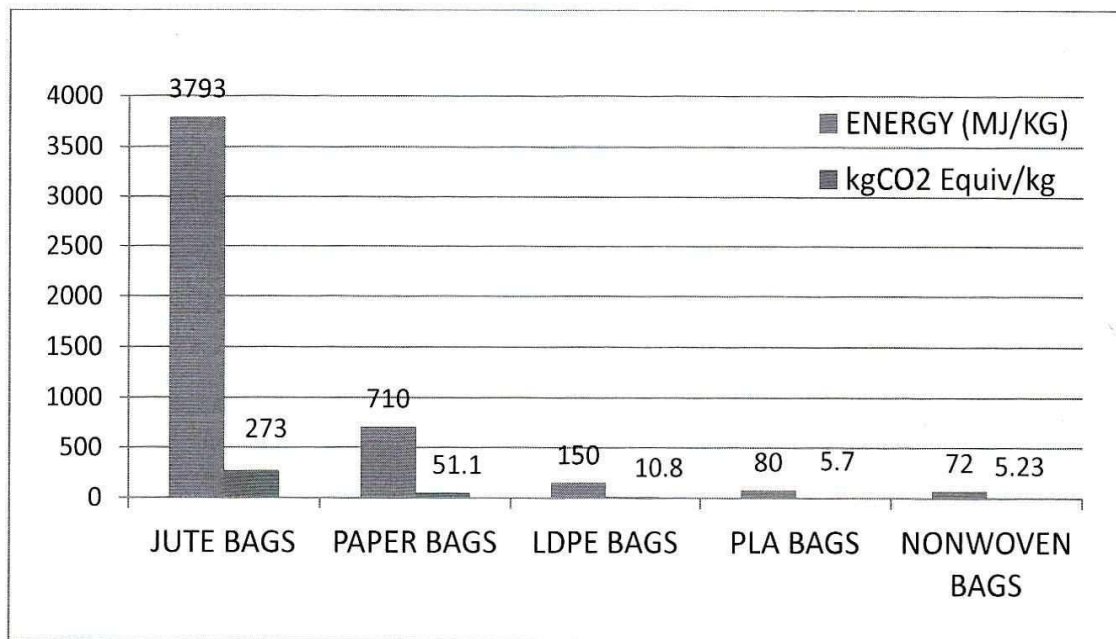
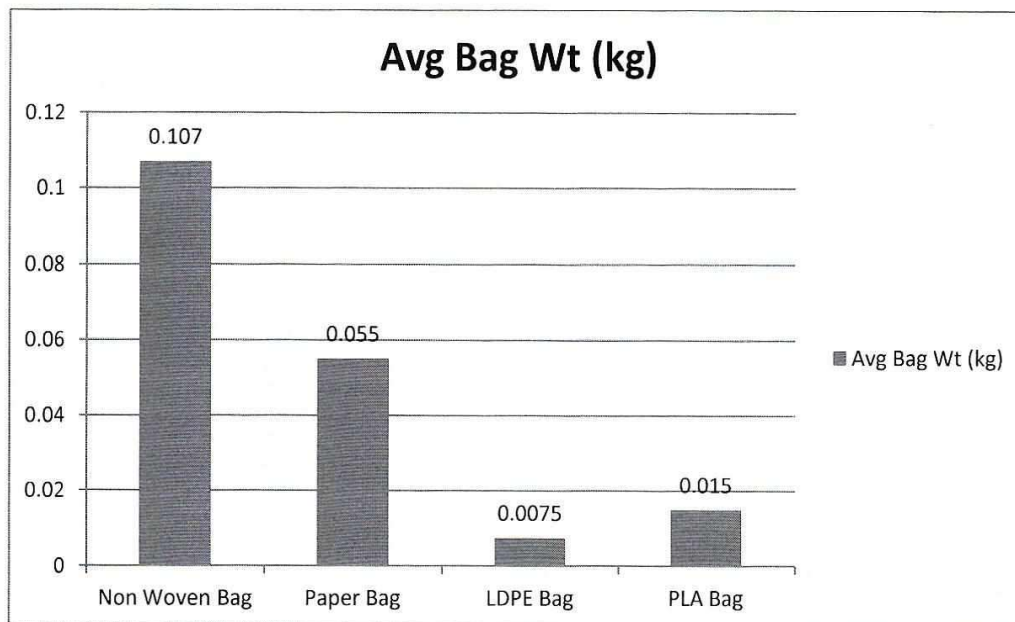
Manufacturing Process flow chart of Spun bond Non-woven Bag



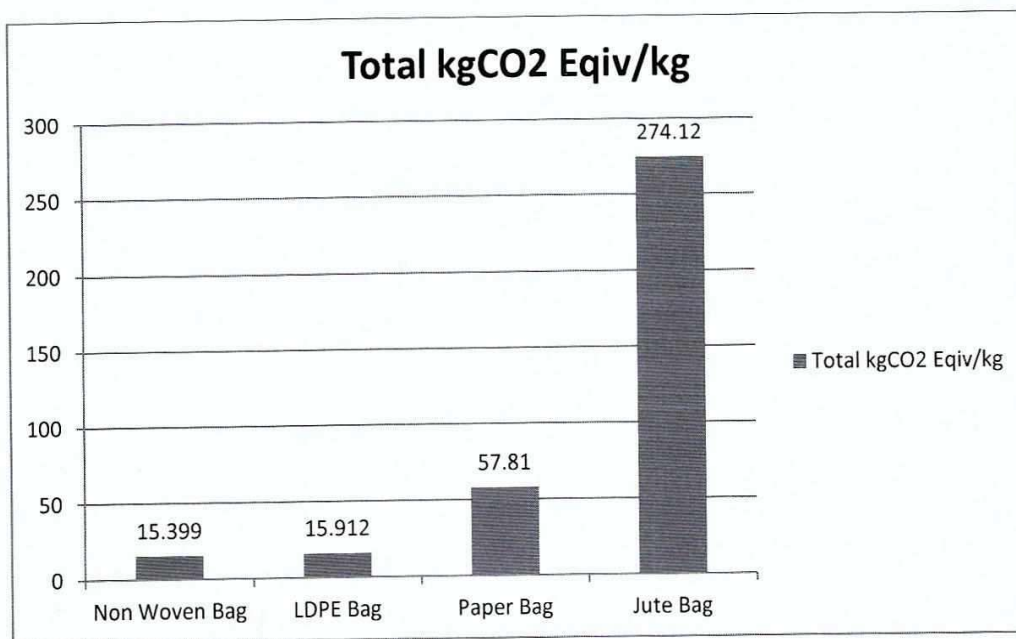
PROPERTIES OF PP NON WOVEN BAGS

- a. RECYCLABLE :** Non Woven bags are 100% recylclable as it is made from fiber grade polypropylene. Attached reports from CIPET Aurangabad dt. 08.07.2018, Certificate from DKTE Centre of Excellence in Non Wovens d 27.03.2018 clarifies the same.
- b. PHOTO DEGRADABLE :** Non woven bags have a natural property of degradation under exposure of sunlight. Attached reports from CIPET Aurangabad dt. 15.12.2017, Shriram Institute of Industrial Research dt. 18.02.16 scientifically clarifies the same.
- c. WATER AND AIR PERMEABLE:** Non woven bags are porous in nature and hence do not blocks the flow of water and air. Attached report from Shriram Institute of Industrial Research dt. 03.10.12 clarifies the same.
- d. SAFE IN CONTACT WITH FOODSTUFF, PHARMACEUTICAL AND DRINKING WATER:**
Non woven fabric is manufactured using IS 10910 complaint Polypropylene Grade from Reliance Industries Limited, Indian Oil Corp. Ltd etc. As per IS 10910 Technical Data Sheet from Reliance Industries Ltd and Indian Oil Corp. Ltd, it cleraly states that Polypropylene and its Copolymers are safe for use in contact with Foodstuff, Pharmaceutical & Drinking water. Attached Technical Data Sheet of RIL and IOCL.
- e. NON TOXIC:** Non woven bags are chemically inert and non toxic. Attached Certificate from DKTE Centre of Excellence in Non Wovens d 27.03.2018 clarifies the same.

LIFE CYCLE OF A NON WOVEN BAG

ENVIRONMENTAL IMPACT OF NON WOVEN BAGS**LCA STUDY OF PLASTICS PACKAGING PRODUCTS – CENTRAL POLLUTION****CONTROL BOARD, MARCH 2018****Nonwoven Bags consumes least energy during Manufacturing Process****Non woven bags average weight is more than LDPE, Paper and PLA Bags**

Non woven bags are better than Paper, Jute and LDPE bags in terms of Greenhouse gases emission which causes Global Warming



**AS PER THE UNITED NATIONS ENVIRONMENT PROGRAMME
MEDITERRANEAN ACTION PLAN dt 11 Sept 2018**

- Non-Woven polypropylene bags (or others such as nylon and polystyrene bags). This option is very suitable to be sold in supermarkets, and they can be reused later at smaller grocery shops. In Ireland, non-woven bags are now by far the preferred bag by consumers, chosen by 66% of those surveyed as their bag of choice

**SUSTAINIBILITY VICTORIA. COMPARISION OF EXISTING LIFE CYCLE ANALYSIS
OF SHOPPING BAG ALTERNATIVES, APRIL 2007**

- Australia has termed Nonwoven bags as **GREEN BAGS**
- Reusable Nonwoven bags have lower environmental impacts than all of the single use bags
- A substantial shift to more durable bags would deliver environmental gains through reductions in greenhouse gases, energy and water use, resource depletion and litter.
- The reusable, non-woven plastic (polypropylene) 'Green Bag' was found to achieve the **greatest environmental benefits**
- Recycled content in bags generally led to lowering the overall environmental impact of bags The end of life destination is crucial, with greater environmental savings achieved from recycling all bags at the end of their useful life
- Reusable Non Woven Green bags have a **Life Expectancy of 104 trips (2 years)**

**BUILDING LONG TERM SOLUTIONS: RETAIL SHOPPING BAG IMPACTS AND
OPTIONS, BSR JUNE 2010**

As per report of BSR dt June 2010, Non Woven bags are found to be better than any kind of bags.

BAG TYPE	MATERIAL CONSUMPTION (KG)	GREENHOUSE GASES (kg CO2)	FOSSIL FUEL Consumption (kg SB Eq)	EUTROPHICATION (kg PO4 Eq)	LITTER ASTHETICS (M2.Y)
Starch PE Bags	3.12	4.74	0.0694	0.00258	0.078
Single Use HDPE Plastic Bags	3.12	6.13	0.102	0.00246	0.312
Kraft paper Bags	22.152	30.2	0.285	0.0266	0.078
PLA Bags	4.212	16.7	0.0776	0.00911	0.078
Non Woven Bags	0.209	1.95	0.023	0.00126	0.00187

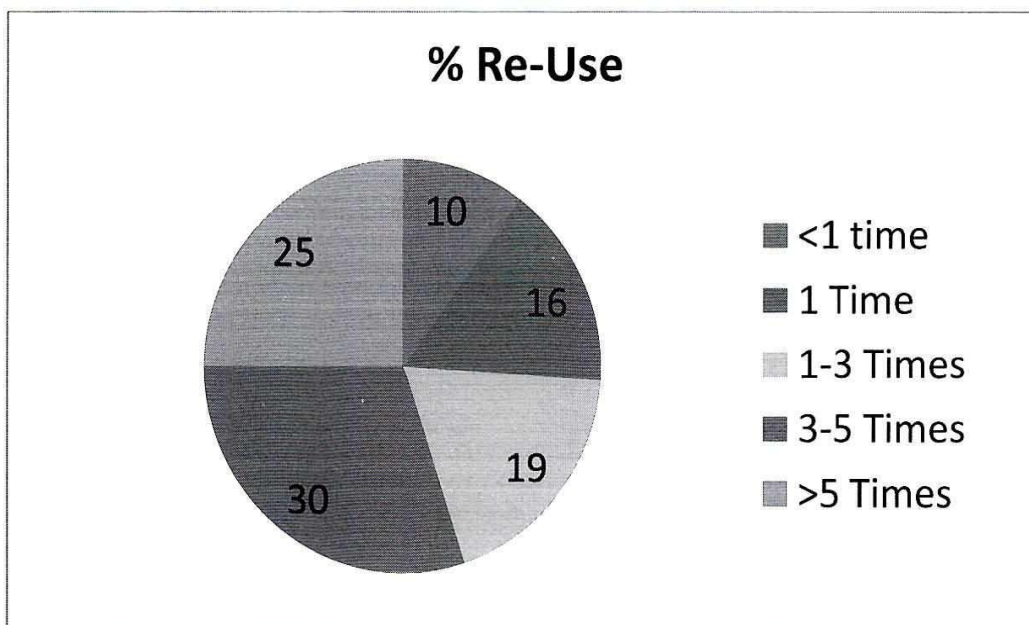
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Cotton Bags	1.141	6.42	0.0177	0.00795	0.00164
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*Eutrophication refers to the emissions of Nitrates and Phosphates into waterways

NON WOVEN BAGS ARE USED MULTIPLE TIMES

- As per the Survey Conducted by the Hong Kong Polytechnic University- Eco Impact of Shopping Bags; Consumer Attitude and Government Policies
 - 30% Indian Consumers Re-Use Nonwoven Bags 3-5 Times.
 - 25 % Indian Consumers Re-Use Nonwoven Bags More than 5 times.



CONCLUSION

To safeguard the Environment, we should opt for Reusable Shopping Bags, made of materials that

- Don't harm the environment during production'
- Don't need to be discarded after each use
- Reduce pollution
- Save resources that could be put to better uses than making plastic or Paper bags.

**NONWOVEN FABRIC BAGS EMERGES AS THE BEST AVAILABLE
OPTION ON ALL SUCH PARAMETERS**