International Journal of Engineering Applied Sciences and Technology, 2022 Vol. 7, Issue 5, ISSN No. 2455-2143, Pages 229-232 Published Online September 2022 in IJEAST (http://www.ijeast.com)



# SUSTAINBILITY: WITH THE REFERENCE OF COW DUNG PRODUCTS

Asst. Prof. Kunjar Atul Nandkumar Department of Fine Art, MGM University, Aurangabad

Abstract: The research is, to start using material which is Sustainable, because of this many environmental questions has come in front. One of them is become indivisible part of human's life that is plastic. We humans are using plastic from water-bottle to till product and other industrial uses. Because, many plastics are so durable and do not corrode, but they create considerable disposal problems. For the Dung" following research "Cow Products and Sustainability, is the material used and is studied on all its potential. There are many reasons behind selecting the material, from all the other organic and recyclable materials. In comparisons of other material like wood, metal and glass. "Cow dung" is easy to recycle, affordable and lightweight also. We could make product as well as three- dimensional structures using it. "Cow dung" has its own limitations, but we should understand the nature of material and decide how and where we should use it. We can help farmers in India financially by using cow dung. And employment can be provided to the youth in rural areas.

*Keywords:* Cow dung, Cow Dung Products, Sustainable products, environmentally Friendly, Alternative Material Source.

## I. INTRODUCTION

Since I am originally from a village, I am influenced by many things in the village. The customs and lifestyle of the village are closely watched. Everything from cows is very important in village life. But beyond that, what else can I do? My emphasis is on this. That's why I'm doing research on cow dung and its derivatives. Intent of the concept of project is to grow the use of nature-friendly things. Many things we used in our day to day life are hazardous to the nature, and they are in big amount also increasing. Project is annotating, how can replace the things which are dangerous to the nature in sustainable products. In India, cattle's rearing is a tradition in the country and intimately limited to the rural wealth. Cow dung is habitually used as organic nourishment in Indian subcontinental farming for centuries. In the same way, some people today are working on sustainable, environmentally friendly products, including making many such items from cow dung.

"The earth provides enough to satisfy every man's needs but not every man's greed" - Mahatma Gandhi

Taking the inspiriting by this meaningful thought, organic and recyclable material could use for this product. Nature conservation is a future need and every civilian should start using sustainable products, this thought is expressed by the research. Product design is the field where huge amount of material get wastage and few of them get recycled or reused Material like Plastic and plywood is not easily recyclable and eventually it's got ended up on land. Similarly, plastic is a toxic material for earth and it is increasing day by day. Few plastics gets recycled and other comes end up in garbage. To stop this environmental degradation in such amount I have tried to some research on sustainable material and products. Which will easy to use and eco-friendly. The research has completed Because of material study and experiment. "Cow dung" also creates a three-dimensional surface considering "Cow dung" as an obvious material, it has proved.

## Importance in Vedas

In the Hinduism Vedas state that the cow is sacred and should be worshiped. In India, cows are very important animal resources and are very useful in farming and dairy industry. Cow's urine, milk, ghee, curd and dung, this five products possess healing properties against many disorders. This kind of process is called Panchagavyaremedy or cowpathy. Cowpathy is an ancientmethod of medicine mentioned in ancient Indian literature (Ayurveda) as PanchagavyaChikitsa. The ayurvedic medicines of animal source are mostlyready from Panchagavya which increase up the body immune system and makes the body refractory to diverse diseases.Although some Indian literature mentioned the medicinal property of cow excretion several useful properties of cow urine got confirmed by researchers patent also.

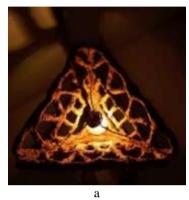
## Selection and justification of topic

The research is, to start using material which is nature-friendly and because of this many environmental questions has come in front. One of them is become indivisible part of human's life that is plastic. We humans are using plastic from water-bottle to till product and other industrial uses. Because many plastics are so durable and do not corrode, but they its possibilities. There are create considerable disposal problems.

For the following research "Cow dung" is the material used and is studied on all



Many reasons behind selecting the material, from all the other organic and recyclable materials. In comparisons of other material like wood, metal and glass. "Cow dung" is easy to recycle, affordable and lightweight also. We could make product as well as three- dimensional structures using it. "Cow dung" has its own limitations, but we should understand the nature of material and decide how and where we should use it. We can help farmers in India financially by using cow dung. And employment can be provided to the youth in rural areas.



## Cow dung uses in construction

Cow dung has habitual necessity when it implement to plastering walls and floorings. The bacterium of cow dung are inhaled it enhances the growth of the neurons in our body, which in turn stimulates the growth of serotonin and norepinephrine in the brain, basically the happy drug is released. This works sensations against nervousness & has exposed a good living. Cow dung is not only a good binder, but the fibers present in the dung also help in creating smooth, fine floor finish; the fibers prevent cracking in floors and also rises the protection properties of the plaster. The 3-5 Core microbes/gram of dung means hordes of good bacteria.



The cow dung is an antifungal pesticide, which is why we have been assuredly using those homes and floors. It has disinfected things and it is also a medicine.

## Ecological fabric developed from cow dung

Thanks to a research project in a laboratory in Eindhoven, this alternative natural materials specialist began looking at the composition of manure. She discovered that by decomposing this waste, it was possible to extract two elements: a wet fraction, resulting from the urine, and a dry fraction, resulting from the solids.Once separated, these two elements make it possible to produce on the one hand, a solvent, and on the other hand cellulose pulp: a material that can be used to make paper, bioplastics, and textile fibers. Jalila Essaïdi developed a brand new ecological fabric, Mestic (after "mest", which means manure in Dutch), from recycled cow dung. For the time being, twelve clothing prototypes have been produced thanks to the manure the entrepreneur sourced from farmers in her region.



## Furniture from cow dung

Sane Mafa came up with the idea in an offer to create valuable items from the unwanted material. The cow dung is pretreated so it has none of its symbol pong. Sane Mafa came in part from the traditional use of cow dung in building materials in some parts of Africa. After undertaking research and perfecting a developed process using a special resin, Miss Mafa can now shape, mold and style cow dung into designer furniture. The cow dung part of furniture can be allowed to decompose into fertilizer. As designer says she wanted to showcase "cow dung as a beautiful material for product and furniture design".



# Eco friendly paint from cow dung

In the last few years, the Government of India has introduced natural paints. This can make India environmentally and economically viable. In the Indian natural products background, Cow dung paint is not the first daily product to be made using cow waste. On the market there are already redolence sticks in cow dung; in 2015 a natural antiseptic from cow urine was developed. In Indian villages it is tradition, in fact, to use cow dung or flat meatballs made from cow waste for several purposes, and it is a communal view to find piles of cow dung flat patties near beside of houses. In fact, before the



arrival of cooking gas, many Indian houses also used cow dung flat balls as fuel.

## **Identification of problem**

After research on the Product design industry things have come to notice that a variety of materials used for Product display are hazardous for the environment, the results of which comes under the research and case study. Plastic is the material often used for Product s, which is not biodegradable and also not recyclable. Recycling process of the Plastic is not cure for the problem. The recycling of Plastic, plywood can be harmful for all living creatures because dust particles creates breathing is also the recycling plants utilizes large amount of energy. Plastic material has spread on landfill for many years and soil degradation is increasing gradually. Even after knowing all the problems related to the material, there are no materials which has been used.

Also, there should be the awareness of this environmental degradation at a social level it should be understood that, there is a need to solve this problem, before it gets too harsh.

# Suggestion and possibilities

Cow dung is the proposed material for Products. By making cow dung products this can new technique of installation con be introduced following points will show how cow dung can be made sustainable and eco-friendly. The material using is dung and hence as compared to wood or metal it is low on cost. Low cost for manufacturing and hence low on selling price Easley affordable for home and offices as well. The man power needed for building the blocks will be less as it will be machine cut and folded and hence less man power required only for folding and assembling. As we all know paper as a material it is very light for any purpose used. The idea of Paper for furniture is slightly indigestible for many of you. Give it a try and rest is up to you to decide. We can help farmers in India financially by using cow dung. And employment can be provided to the youth in rural areas. As we have been doing crafting form the early ages we know we can do Cow dung into any different shapes and forms similarly here we can create a large variety of shapes as per the requirement and need. The awareness is the process which can be done by using the sustainable material The regular use of the material like wood, jute, bamboo, cardboard paper and many more creates an impact to the social life It can convey the message by regular use of environment friendly material.

# II. CONCLUSION

Cow dung medium is eco Friendly choice and is good for mother earth and nature. We can help farmers in India financially by using cow dung. And employment can be provided to the youth in rural areas. The product made from Cow dung is easy to assemble with there is no requirement of tools, screws or nails. Lightweight product and fixtures that is easy to move around. When shifting is required. The use of Cow dung in Product displays are always beneficial because it can be recycled after long use into paper and paper board. Cow dung can be replaced by corrugated sheets, and earth degradation can be reduced because paper is a recyclable material, no trees will get cut for paper hence forth. Cow dung structures can get easily demolished and will be sent to the recycling so, the process of cleaning will be faster. By reusing the Cow dung we can create a utility products and save the earth from harmful wastage.

# III. REFERENCE

- [1]. Kartikey Kumar Gupta, Kamal Rai Aneja, Deepanshu Rana 2016 an article on Current status of cow dung as a bioresource for sustainable development, Bioresources and Bioprocessing 2016.
- [2]. Kamala Thiagarajan 2020 Shampoo made from cow dung? Yes, toothpaste too, and art – Indian entrepreneurs milk Hindu love of all things bovine, 2 Jan, 2020 (Retrieved From <u>https://www.scmp.com/lifestyle/arts-</u> <u>culture/article/3044026/sales-cow-dung-art-soap-</u> <u>shampoo-toothpaste-and-more-</u> <u>india?module=perpetual scroll 0&pgtype=article&c</u> <u>ampaign=3044026</u>)
- [3]. Jalila Essaïdi July 16, 2015 From Wikipedia, the free encyclopedia (Retrieved From <u>https://en.wikipedia.org/wiki/Jalila Essa%C3%AFdi</u>)
- [4]. Lawrence Wilfred June 2022 "Laurie" Baker (2 March 1917 – 1 April 2007) (Retrieved From https://en.wikipedia.org/wiki/Laurie\_Baker)
- [5]. Cow Dung Soap Is Cleaning Up In India (Retrieved From <u>https://www.npr.org/sections/goatsandsoda</u> /2018/10/03/653739760/cow-dung-soap-is-cleaningup-in-india)
- [6]. <u>Express News Service</u> Chandigarh, February 13, 2018 Haryana: 90 per cent grant on equipment to make cow dung products (Retrieved From <u>https://indianexpress.com/article/india/haryana-90per-cent-grant-on-equipment-to-make-cow-dungproducts-5061564/)</u>
- [7]. India's First 'Eco-Friendly' Cow Dung Paint Launched Are We Inching Closer To Self-Sustainability? <u>Avani Raj</u> January 14, 2021 (Retrieved From <u>https://edtimes.in/indias-first-ecofriendly-cow-dung-paint-launched/)</u>
- [8]. 9.Varun P, Feb 26, 2021 Cow Dung Paint An Ecofriendly Paint <u>https://medium.com/climateconscious/cow-dung-paint-an-eco-friendly-paintf60d9b345a93</u>
- [??]. PA Images / Alamy Stock Photo, 3 September 2017 (Retrieved From<u>https://www.alamy.com/birmingham-city-</u> <u>university-student-sane-mafa-with-her-designer-</u> <u>furniture-image157210474.html</u>)



- [??]. Himanshu Burte 25 NOVEMBER 2019 Author Archives: Laurie Baker (1917-2007) (Retrieved From <u>https://www.architectural-</u> review.com/author/himanshu-burte)
- [11]. Oscar Holland 29th September 2022 Cow dung speakers and dog hair rugs: Innovative upcycling at Singapore Design Week <u>https://edition.cnn.com/style/article/singapore-</u> design-week-upcycling-materials/index.html

[12]. https://www.re-thinkingthefuture.com/alternativematerial/a4036-alternative-materials-cow-dung-paint/ Aga Khan Program Lecture November/13,/2018: Anna Heringer, "Architecture is a Tool to Improve Lives" (Retrieved From https://www.gsd.harvard.edu/event/anna-heringerarchitecture-is-a-tool-to-improve-lives/) Samali Basu Guha, June 24, 2018 How Geeli Mitti is building sustainable houses using natural materials (Retrieved From https://www.businessstandard.com/article/current-affairs/how-geeli-mittiis-building-sustainable-houses-using-naturalmaterials)