# Medicinal & Native Landscaping- Remedy to Protect Environment from devil of Pollution

# Sushma Kotgiri

Assistant Professor, SKN Sinhgad Business School, Korti, Pandharpur Email: sush123\_kotgir@rediffmail.com

# INTRODUCTION

Today everywhere whether it is Television, FM, Newspaper or even on Internet most news are related with flood, earthquake, tsunami, victims due to heat, water pollution, Air pollution, sound pollution and different problem which are the real causes of decrease in OZONE LAYER. This is very badly affecting on the Environment. As natural cycle is changing, it is affecting more on human beings. This change is resulted in increased percentage of Carbon in atmosphere. Due to increase in Carbon people are affected and infected by various deceases like Asthma Cancer and other lungs deceases. To solve all these problems we have only one remedy that is Plantation.

India is rich in its culture and heritage. India is the original of Ayurvedas and now Ayurvedic medicine is accepted all over the word due to its prime peculiarity of No Side effects. So we Indians can make excellent use of this availability.

One more emerging concept is that "Landscape Contracting".

**Landscaping** refers to any activity that modifies the visible features of an area of land, which includes living <u>elements</u>, such as <u>flora</u> or <u>fauna</u>; or what is commonly referred to as <u>gardening</u>, the art and craft of growing plants with a goal of creating a beautiful environment within the landscape.

Landscaping is natural elements such as landforms, terrain shape and elevation, or bodies of water.

Landscaping is both science and art, and requires good observation and design skills. A good landscaper understands the elements of nature and construction, and blends them accordingly. Following are the different categories of landscaping.

- 1 Aquascaping
- 3 Horticulture
- 5 Landscape contracting
- 7 Landscape ecology
- 9 Landscape planning

- 2 Ecoscaping
- 4 Landscape architecture
- 6 Landscape design
- 8 Landscape engineering
- 10 Naturescaping

11 Sustainable landscaping

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If we select the combination of medicinal plants with **landscape contracting** we will definitely serve purpose to reduce the pollution and made our environment pollution free.

- 1. Medicinal plants used as natural medicines.
- 2. Native plant is a term to describe plants endemic (indigenous) or naturalized to a given area in geologic.
- 3. This includes plants that have developed, occur naturally, or existed for many years in an area (e.g. trees, flowers, grasses, and other plants)
- 4. Some native plants have adapted to a very limited, unusual environments or very harsh climates or exceptional soil conditions. Although some types of plants for these reasons exist only within a very limited range (endemism), others can live in diverse areas or by adaptation to different surroundings (indigenous plant).
- 5. As societies move plants to new locations for cultivation as crops or ornamentals (or transport them by accident), a small percentage may become invasive species, damaging native plant communities in the introduced range. Besides ecological damage, these species can also damage agriculture, infrastructure, and cultural assets. Government agencies and environmental groups are directing increasing resources to addressing these species and their potential interactions with climate change.
- 6. Our mission is to promote the appreciation, preservation, conservation, utilization and scientific study of the flora native to Indiana and to educate the public about the values, beauty, diversity and environmental importance of indigenous vegetation.
- Gardening is the practice of growing <u>plants</u>. <u>Ornamental plants</u> are normally grown for their <u>flowers</u>, <u>foliage</u>, overall appearance, or for their <u>dyes</u>. Useful plants are grown for consumption (<u>vegetables</u>, <u>fruits</u>, <u>herbs</u>, and <u>leaf vegetables</u>) or for medicinal use. A gardener is someone who practices gardening.
- 8. Gardening ranges in scale from <u>fruit orchards</u>, types of <u>shrubs</u>, <u>trees</u> and <u>herbaceous</u> <u>plants</u>, to residential <u>yards</u> including <u>lawns</u> and foundation plantings, to large or small containers grown inside or outside. Gardening may be very specialized, with only one type of plant grown, or involve a large number of different plants in mixed plantings. It involves an active participation in the growing of plants, and tends to be labor intensive, which differentiates it from <u>farming</u> or <u>forestry</u>.
- 9. Gardening for food extends far back into <u>prehistory</u>. <u>Ornamental gardens</u> were known in ancient times, a famous example being the <u>Hanging Gardens of Babylon</u>, while <u>ancient Rome</u> had dozens of gardens.
- 10. The earliest forms of gardens emerged from the people's need to grow herbs and <u>vegetables</u>. And yet, many rich individuals in the past had gardens for the purely decorative purpose.
- 11. Ornamental gardens existed since <u>ancient Egypt</u>, when rich people used them as a means to relax in the shade of the trees. Egyptians associated trees and gardens with gods as they believed that gods liked gardens. Commonly, the gardens in ancient Egypt were surrounded by walls with trees planted in rows. Among the most popular

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species that used to be planted were <u>date palms</u>, sycamores, <u>fig trees</u>, nut trees, and <u>willows</u>. Rich people also grew vineyards, as <u>wine</u> being the beverage for the wealthy. Roses, poppies, <u>daisies</u> and <u>irises</u> did not miss from the gardens of the Egyptians.

- 12. <u>Residential gardening</u> takes place near the home, in a space referred to as the <u>garden</u>. Although a garden typically is located on the land near a residence, it may also be located <u>on a roof</u>, in an <u>atrium</u>, on a <u>balcony</u>, in a <u>window box</u>, or <u>on a patio</u> or <u>vivarium</u>.
- 13. Gardening also takes place in non-residential green areas, such as <u>parks</u>, public or semi-public gardens (<u>botanical gardens</u> or <u>zoological gardens</u>), <u>amusement</u> and <u>amusement parks</u>, along transportation corridors, and around <u>tourist attractions</u> and <u>garden hotels</u>. In these situations, a staff of gardeners or grounds-keepers maintains the gardens.
- 14. <u>Indoor gardening</u> is concerned with the growing of <u>houseplants</u> within a residence or building, in conservatory, or in a <u>greenhouse</u>. Indoor gardens are sometimes incorporated as part of conditioning or <u>heating</u> systems.
- 15. <u>Native plant gardening is concerned with the use of native plants</u> with or without the intent of creating <u>wildlife habitat</u>. The goal is to create a garden in harmony with, and adapted to a given area. This type of gardening typically reduces water usage, maintenance, and fertilization costs, while increasing <u>native faunal</u> interest.
- 16. A "gardener" is any person involved in gardening, arguably the oldest occupation, from the <u>hobbyist</u> in a <u>residential garden</u>, the homeowner supplementing the family food with a small <u>vegetable garden</u> or orchard, to an employee in a <u>plant nursery</u> or the <u>head gardener</u> in a <u>large estate</u>.
- 17. The term gardener is also used to describe <u>garden designers</u> and <u>landscape</u> <u>gardeners</u>, who are involved chiefly in the design of gardens, rather than the practical aspects of <u>horticulture</u>
- 18. Ornamental plants are plants that are grown for decorative purposes in <u>gardens</u> and <u>landscape design</u> projects, as <u>house plants</u>, for <u>cut flowers</u> and specimen display. The cultivation of these forms a major branch of <u>horticulture</u>.
- 19. Native plants = palas, pangara, pimpal, mango, bahava, jambhul.
- 20. Ornamental plants= axora, duranda, jerbera, gladiosa,

Traditional use of medicines is recognized as a way to learn about potential future medicines. In 2001, researchers identified 122 compounds used in mainstream medicine which were derived from "ethno medical" plant sources; 80% of these compounds were used in the same or related manner as the traditional ethno medical use.

### **OBJECTIVES**

- 1. To check the awareness of landscaping in the society.
- 2. To know the importance of medicinal plants.

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- 3. To see the effects of pollution on environment.
- 4. To suggest the remedies to the problems.

## **RESEARCH METHODOLOGY**

The study is based on primary data. Data is collected from the different places like Pandharpur, Solapur and Pune. Purposive sampling was used because of growing concept and it is somewhat difficult to get samples which were required for the study. The structured questionnaire is designed to collect the information regarding the medicinal landscaping. The structured questionnaire was distributed for 150 samples in the selected area, of which 113 were returned. After editing the received questionnaire, 100 questionnaires were used for further analysis. Along with questionnaire, discussions also held to elicit the information from respondents. Likert scale was 1 represented as strongly agree and 3 represented strongly disagree.

# **DATA ANALYSIS**

According to the survey conducted to collect the data following analysis has been done.

#### SECTION ONE

Table 1. Demographic Details of Respondents-				
Demographic Details	Item	Number of respondents	Percentage %	
Gender	Male	38	38 %	
	Female	62	62%	
Age	20-40	66	66%	
	40-60	34	34%	
Education:	Under -graduate	8	8%	
	Graduate	63	63%	
	Post- graduate	29	29%	
Status	Student	28	28%	
	Professional	54	54%	
	Home-maker	18	18%	
Farming Background	Yes	64	64%	
	No	36	36%	

- -

#### Source: Survey

The above table 1 explains that out of total respondents 38 percent respondents were male and 62 percent were female respondents. Maximum respondents that are 66 percent respondents were from age category of 20 - 40 and remaining from 40 - 60 categories. As far as education levels of respondents are concerned out of total respondents 63 per cent are graduate and 29 percent are post graduate and remaining are under graduate. Out of total respondents 28 percent, 54 percent, 18 percent are from student category, professionals and home-maker respectively. 64 percent respondents are from farming background and 36 percent are from non-farming background.

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# SECTION TWO

Section two contains the details about respondents.

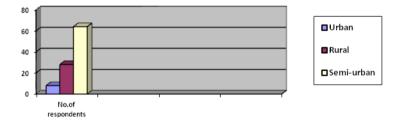
Section two provides the information about respondents like residential area, locality, pattern of house, area available for plantation, what types of plants they like to have, ways of taking care of plants and most important what are the uses of their plants and what they know about it.

Sr. no	Particulars	No.of respondents
1	Urban	8
2	Rural	28
3	Semi-urban	64
	Total	100

Table 2. The residential area of respondent-

# Source: Survey

Table no.2 explains the details about the residential area where respondents live like urban, rural or semi-urban. Out of total respondents 64 percent respondents are living in semi-urban area and 8 percent respondents are living in urban area. This is a graphical representation of above data-



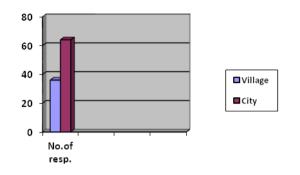
Graph 1

Table 3. Type of locality

Sr. no	Type of locality(Area)	No.of respondents
1	In the city/village	36
2	Outside of the city/village	64
3	Total	100

#### Source: Survey

Above table provides the information of where are the .respondents living whether in the city or out of the city. 64 percent people (respondents) are preferring to live outside of the city or village.



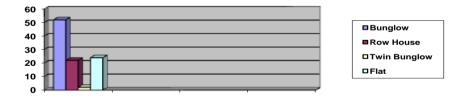
# Graph 2

# Table 4. Pattern of your house-

Sr.no	Pattern of House	No. of respondents
1	Bun galow	52
2	Row house	32
3	Twin bun glow	2
4	Flat	14
	Total	100

# Source: Survey

The above table shows that maximum of respondents that is 52 percent are living in Bungalow, 32 per cent are living in Row houses, minimum that is lesser 2 per cent are living in Twin Bungalows and 14 percent are living in flat. Graphical representation of data is shown in-



Graph 3

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Sr. no	Particulars	No.of respondents
1	Yes	86
2	No	14
	Total	100

#### Table 5. Information about open space to your home-

# Source: Survey

Table 6. You like to have garden to your home

Sr.no	Particulars	No. of respondents
1	Yes	94
2	No	6
	Total	100

Source: Survey

#### Table 7. Garden in your house

Sr.no	Particulars	No. of respondents
1	Yes	90
2	No	10
	Total	100

#### Source: Survey

Table no.5, 6 &7 shows that maximum respondents have

Table	<b>8</b> .	Types	of p	lants
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Sr.no	Particulars	No.of respondents
1	Medicinal	23
2	Native	62
3	Ornamental	15
	Total	100

# Source: Survey

Now important information about plants like how many respondents are really aware and what type of plants they have in their garden like Medicinal plants, native plants or ornamental plants. We got responses in the below mentioned form like 23 percent respondents have information about medicinal plants, 62 percent are about native plants and 15 percent about ornamental plants.



# Graph 4

Table 9. Caretaker of the garden

Sr.no	Particulars	No.of respondents
1	Individually yourself	48
2	Gardener	18
3	Other family members	34
	Total	100

# Source: Survey

Researcher tried to collected information about caretaker of garden or plants. 48 percent respondents take care of their plants, 18 percent care has been taken by Gardener and 34 percent are combiningly taking care of plants.





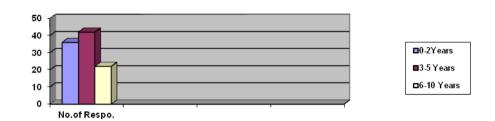
Table 10. From when you are taking care of garden

Sr.no	Particulars	No.of respondents
1	0-2 years	36
2	3-5 years	42
3	6-10 years	22
	Total	100

Source: Survey

The above table explains that maximum respondents (42 percent) are associated with plants from last 3-5 years and 22 percent respondents are from 6-10 years.

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# Graph 6

Table 11. Information heard about medicinal plants.

Sr.no	Particulars	No.of respondents
1	Yes	92
2	No	08
	Total	100

# Source: Survey

Table 12. Information about native plants

Sr.no	Particulars	No.of respondents
1	Yes	84
2	No	18
	Total	100

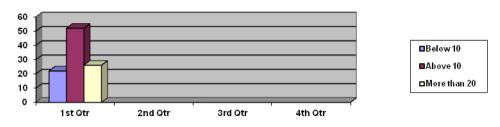
## Source: Survey

Table 13. No. of Plants in your garden

Sr.no	Particulars	No.of respondents
1	Below 10	22
2	Above 10	52
3	More than20	26
	Total	100

# Source: Survey

The above table shows the details of how many plants respondents have in their garden like 26 percent respondents have more than 20 plants, 52 percent respondents have more than 10 plants and 22 percent respondents have less than 10 plants.



Graph	7
Oraph	

Table 14. Basic criteria for plantation in the garden

Sr.No	Particulars	No.of respondents
1	Aesthetic	18
2	Hobby	54
3	Other	28
	Total	100

# Source: Survey

The above table shows that maximum 54 percent respondents are dealing with plants as hobby and other 18 percent are aesthetic.

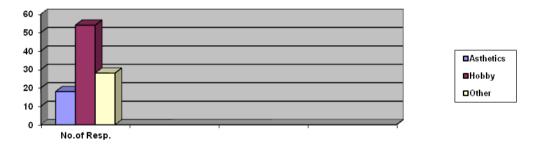




Table 15. Information about household nursery

Sr.No	Particulars	No. of respondents
1	Yes	66
2	No	24
	Total	100

Source: Survey

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Sr.no	Particulars	No. of respondents
1	Yes	41
2	No	59
	Total	100

Table 16.	Believes	in plantation
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Source: Survey

According to table no.15 & 16 people are aware about the concept of household nursery and now people are believing in plantation. 66 percent respondents knew about the household nursery and 41 percent respondents believe in plantation.

# SECTION THREE

Table 17 explains importance of plantation and which plants are useful.

Sr.	Particulars	Strongly	Agree	Strongly
No.		agree		disagree
1	Pollution can be controlled by plantation.	100	-	-
2	A traditional medicine like AJIBAICHA BATAVA is really useful.	83	5	12
3	For the basic prevention of the disease, we can use household medicines like TULASI, ADULASA.	35	25	40
4	It is said that there are no side effects of household medicines.	100	-	-
5	Garden should have rare or extinct plants of our flora.	90	4	6
6	We should know usefulness native plants in our surroundings.	94	6	-
7	Native plants help to increase our biodiversity.	94	4	2
8	It is essential to grow more and more medicinal plant and native plant.	100	-	-
9	It is a good concept PLANTS AS A GIFT, on festivals or some special events.	50	25	25
10	Efforts in respect of activities, lectures or programmes related to environmental awareness or plantation awareness should be taken.	43	5	52
11	Even small garden also, help in the balancing of nature activities.	45	28	22
12	OPEN PLACE, near to your residency can be utilized for plantation program	87	7	6
13	It is proud to preserve large trees like banyan, pimple.	100	-	-
14	Natural calamities are the results of imbalance in nature.	80	5	15

Table 17. Importance	of plantation
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Section 3 explains that pollution can be controlled by plantation and it is very essential to grow more and more medicinal plant and native plant. It is essential to grow more and more medicinal plant and native plant.

It is proud to preserve large trees like Banyan, Pimple. About all these statements all 100 percent respondents are agreed with the above said information. Most of the respondents know the fact that traditional medicines are useful for minor deceases.87 percent respondents are of the opinion that open place in the locality can be utilized for plantation. To increase the awareness about plantation and landscaping special efforts should be taken in respect of conducting environmental activities, lectures or programmes which will be really helpful.One more growing concept is that while celebrating different festivals, birthdays and different social programmes we can give gifts in the form of plants and should try create awareness among the society and among the people.

Researcher tried to collect the information from respondent about the plants which are medicines and helpful to cure deceases. Some common plants like Tulasi, Adulasa, Amla, and Aloe-Vera.

# **FINDINGS**

It is found that-

- a. Maximum people are aware about the environment and plantation is the good remedy for the pollution control.
- b. Maximum respondents know the importance of common medicinal trees like Tulsi, Adulasa, Amla, and Aloe-Vera.
- c. Change is found in the mind set that now- a-days people know the fact about pollution and environmental hazards and for that they were demanding for different seminars and guest lectures for awareness in the general public.
- d. People are of the opinion that is open space is available in their locality; they can go for gardening or landscaping.
- e. People are thinking for innovative ideas like gifts can be in the form of medicinal plants on different occasions like Birthdays, Anniversaries and prizes to children.
- f. People are aware about the no side effects for medicinal plants.
- g. Maximum people are turning from alopathy to ayurvedic medicine.
- h. For the basic prevention of the disease, we can use household medicines like TULASI, ADULASA.
- i. Native plants help to increase our biodiversity.

# CONCLUSION

At last we come to the conclusion that people know the growing concept of landscaping. Landscaping helps to increase beauty as well as helps to prevent the pollution to somewhat extent. People know the importance of medicinal plants and we found that there is increase in the uses.

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# REFERENCES

- 1. Different medicinal books
- 2. <u>en.wikipedia.org/wiki/Landscaping</u>

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