

## AWERNESS ABOUT CONSERVATION AND CULTIVATION OF MEDICINAL PLANTS

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### ABSTRACT

Increasing curiosity of Ayurvedic medicines in which herbs are centre of attraction in peoples, as well as demand & supply of herbs to pharmacy industry is the main reason for creating awareness about conservation & cultivation of medicinal plants. The increasing demand of herbal products world over, therefore, creates a need not only for conserving medicinal plants in-situ but also their cultivation outside the Forest areas in public and private lands. India has a rich heritage of plant based healthcare systems like Ayurveda, Unani and Siddha with a very high degree of societal acceptance. There is a global upsurge in the use of traditional and complementary systems of medicine. Primarily These systems of medicine, being largely plant based, are generally safe, efficacious and affordable. So considering need of plant cultivation & its medicinal use it is necessary to create awareness about cultivation & conservation. This work requires large task force & it can be achieved in corporation with government strategy agriculture field, pharmacy industry & Ayurveda colleges. Current article reviews following point's need of awareness of cultivation, good agricultural practices, government strategies, pharmacy industry requirements & role of Ayurveda colleges.

**Keywords:** conservation, medicinal plant, cultivation, Ayurved Colleges.

### INTRODUCTION

Dravyaguna is one of the basic subjects of Ayurved science where properties & how to use these drugs in diseased person is mentioned very briefly but there is very little information about cultivation about these plants. As time changes there are also changes in these plants. Some of them are reduced in number and some of them are extinct today. So considering the need of these herbals farmers should be aware about these plants cultivation. For promotion of cultivation of medicinal plants there is lot of scope to Ayurveda colleges in collaboration with various schemes of Indian govt. e.g. National medicinal plant board has been giving various funds for cultivation, conservation as well as research in

medicinal plants. So it is time to alert to us that we should aware of these various schemes and take benefits from them. The documentation of these plants will cover in addition to any other information- history of use, all reported safety and toxicity data, pharmacological and efficacy data including any human studies done, from research publication, MD/PhD thesis of Ayurveda and M. Pharm/PhD thesis form Pharmacy colleges.<sup>1</sup>

### METHODS:

#### Need of Awareness of Cultivation of medicinal plants:

1. For Documentation purpose of herbs because<sup>2</sup> scientific data on Indian medicinal plants is scattered and widespread.

2. The objective is to encourage systematic collection, compilation & digitization of these plants to publish scientific research on various aspects of cultivation of medicinal plants.
3. To promote rational use of Indian medicinal plants through documentation and digitization.
4. To resolve the extents of controversial drugs.
5. Demands of pharmacy industry for preparation of medicinal drugs.
6. Financial benefits to farmers
7. For survival of some extinct or rare drugs.

### **Considerations for Cultivation of medicinal plant:**

Before going to cultivation some things should be considered, as there is increase in use of herbal medicines among peoples in the form of various products. So we have to consider User's needs advancement in technique of preparation of product etc. Another thing is Ayurvedic colleges should take scientific leadership in field of medicinal plants. Considering Economic benefits, National demand and supply scenario of the product it is necessary to harvest & management of forest for medicinal plants should maintain Bio-diversity in conservation. There is need to establish Herbal agro Marketing trend. For promotion of Farming, Linking people with medicinal plants<sup>3</sup> & to overcome difficulties in demand and supply of herb it is mandatory to consider all things discussed above.

### **Good agricultural practices for cultivation<sup>5</sup>:**

The major challenges facing growth and outreach of the traditional/herbal medicinal products are their quality, safety and efficacy. This inter-alia is dependent on the quality of the raw material used in the manufacture of the finished product. The National Medicinal Plants Board (NMPB), Department of AYUSH has prepared India specific guidelines on Good Agriculture Practices (GAPs) on the

pattern of Good Agriculture and Field Collection Practices (GACPs) developed by the World Health Organization (WHO) for medicinal Plants.<sup>4</sup>

1. Depending on the mode of cultivation e.g. conventional or organic, growers should be allowed to follow different Standard Operating Procedures for cultivation.

### **2. Soil and Fertilization**

3. Medicinal and aromatic plants must not be grown in soils that are contaminated by sludge. Soils should not be contaminated by heavy metals and residues of plant protection products and other not naturally occurring chemicals, etc. For this reason, minimum effective chemical input should be achieved.

4. The manure applied should be void of human faces and prior to application it should be thoroughly composted.

5. All other fertilizing agents should be applied sparingly and in accordance with the demands of the plant and the particular species (including application between harvests). The use of fertilizers should be in accordance with efforts to minimize leaching.

6. Irrigation should be minimized as much as possible and applied according to the needs of the plant.

### **Government schemes/ strategies for conservation:**

Govt. of India schemes & guidelines is a set up of interventions to streamline the medicinal plant sector to achieve high quality commercial production. Some of these are mentioned by:

1. National medicinal plants mission provides<sup>6</sup> Financial Assistance for Organizing Seminars / Workshops/ Exhibitions/ Fairs for Market Promotion of Medicinal Plants / Products under National Mission on Medicinal Plants

2. Proposal for Setting up of Quality Testing Laboratory under National Mission on Medicinal Plants
3. Proposal for Post-harvest Management under the Centrally Sponsored Scheme of National Mission for Medicinal Plants.<sup>7</sup>

## DISCUSSION

India has a rich heritage of plant based healthcare system. In Recent era increasing demand of natural/ herbal product around world, so as per demand, need of cultivation practice is essential for supply of drug. The cultivation methods are essential for medicinal plant according to geographical distribution. e. g. herbs like Aconitum heterophyllum can be cultivated in regions of Himalaya<sup>8</sup> and also for purpose of collection, compilation, documentation of medicinal plant.

To Increase interests of younger generations in acquisition of indigenous knowledge and skill in the use of medicinal plant resources for health care delivery it is necessary to aware them. Increase willingness in the conservation of important natural resources by reducing undue pressure on the wild sources. For preservation and cultivation a training workshops can be arranged in collaboration with government agriculture dept, pharmacy industry and Ayurvedic medical colleges. For proper standardization of medicinal plants scientific labs should be established regionally. Training should be given for a medicinal plant nursery. Show demos for medicinal plantation, collection, utilities at college levels. Free medicinal plants should be supplied for Promotion for cultivation trials. For getting good market value of medicinal plant & to avoid market problems, there can be direct communication between formers and pharmaceuticals companies.

## CONCLUSION

So, considering the need & demand of herbal medicines in pharmacy industry as well

as for routine procedures conducted as Pan-chakarma & for OPD medicines one should step forward for cultivation of medicinal plants. It will very big procedure but if carried out by Ayurvedic colleges with well organized program it will be very help full to nation, pharmacy industry as well as practitioners. For this promotion should be done in farmers on large scale by structured theme e.g. which herbals are necessary to cultivate, there economical profit and also of medicinal use. Also farmers should be prepared for good agricultural practices used for medicinal plants.

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**Source of Support:** Nil

**Conflict of Interest:** None Declared