

SURVEY OF MEDICINAL AND ECONOMIC PLANTS OF HILKOT WATERSHED AREA

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Abstract

Medicinal and aromatic plants can be a source of sustained income to the inhabitants of hilly areas, traders, hakims, pharmaceutical and allied industries. The survey brought forth some important facts and figures about floristic composition, status of medicinal and economic plants. At present exploitation of this renewable natural resource is not carried out on scientific lines and thus this resource is not fully utilized. Suggestions have been made for better utilization and the strategy to be adopted to improve marketing channels and their impact on socio-economic conditions of the local communities.

Introduction

Hilkot watershed area is rich in a variety of medicinal and economic plants. Some of which are of pharmacopoeial importance while a large number are used in traditional system of medicine against several diseases by communities in primary health care system. Although this area possesses good potential of medicinal and aromatic plants, still their richness is not known. This natural drug plant resource at present is not utilized according to resource availability, as a result a number of pharmacopoeial species became scarce due to detrimental extraction by inhabitants. Besides, there are many other plants which are of substantial economic importance.

In order to explore the sustainable utilization of medicinal and economic plants to improve the livelihood of the inhabitants, a preliminary rapid vegetation survey was carried out to determine the floristic composition, present status and ethnobotanical uses of plants.

Methodology

Survey of medicinal, aromatic and economic plants was conducted to become familiar with the floristic composition and medicinal plants of the area for sustainable utilization. In addition to this, feasibility of growing fast selling drug

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species along with agricultural crops on community land were switched over to cash earning medicinal crops suitable to the agro-climatic conditions of the region. The introduction of cash earning medicinal crops will not only ensure the pharmaceutical and other allied industries with sustained supplies, but may also help in the economic betterment of local peoples. For recording ethno-botanical information, field studies were carried out in three hamlets of the project area to document indigenous knowledge of local people about plants and their impact on the life of the people. In addition to short interviews, discussion also took place with users and buyers of medicinal plants to know the existing marketing channel and to suggest measure for improvement.

Floristic composition

The Hilkot watershed covers an area of about 20 km² with an latitudinal range from 1500 to 3200 m. Major land at foot-hill and moderate slope were brought under cultivation of cereal crops like maize and rice on terraces. The project area is thickly populated and characterized by grassland with rugged, steep to moderate slope. The southern aspects show the sign of degradation, while northern aspects are thickly vegetated.

The natural conifer forests are met above 2000 m elevation at Perai and Guzara Forest from Saidan Gali to Tal Meteorological Station and Dabli (Naka-sheer) to Hilkot. The common trees are *Pinus wallichiana* (Kail), *Cedrus deodora* (Deodar), *Picea smithiana* and *Abies pindrow*. Among broadleaved trees; *Quercus ilex*, *Q. dilatata*, *Aesculus indica*, *Prunus*, *Ulmus*, *Corylus*, *Alnus*, *Morus*, *Litsaea* and *Euonymus* were principal hardwood species and from local consociation with *Indigofera*, *Lonicera*, *Rosa*, *Rubus*, *Desmodium*, *Viburnum* constituting the under growth. Whereas on the farm lands *Juglans*, *Ailanthus*, *Robinia*, *Diospyros*, *Zizyphus*, *Pyrus*, *Prunus* were common, while along nullahs *Alnus*, *Salix*, *Celtis*, *Ficus* were conspicuous.

Vegetation of Reserved Forest of Perai and Guzara Forest as well as on farm land area were analyzed and comprised both natural and planted species given as under:

Trees

Abies pindrow (Fir), *Aesculus indica* (Bankhor), *Ailanthus altissima* (Ailanthus), *Alnus nitida* (Sharol), *Broussonetia papyrifera* (Jangli Tut), *Cedrus deodara* (Deodar), *Celtis australis* (Batkarak), *Diospyros kaki* (Wild amlak), *Elaeagnus hortensis* (Singli), *Ficus carica* (Injeer), *Ficus palmata* (Ficus), *Juglans regia* (Akhrot),