

The world's greatest concentration of biological wealth is found in tropical developing countries that are beset by acute poverty. Biological diversity comprises countless plants that feed and heal people, many crop varieties and aquatic species with specific nutritional characteristics, livestock species adapted to harsh environments, insects that pollinate fields and micro-organisms that regenerate agricultural soils. Biodiversity, essential for agriculture and food production, is threatened by urbanization, deforestation, pollution and the conversion of wetlands. This poses a great threat to the security of human beings.

Forests play a crucial role in the economies of many countries, providing timber and industrial material as well as contributing to tourism, recreation and cottage industry. Tropical forests help to regulate global climate through the absorption of carbon dioxide. Deforestation and forest degradation continue to occur in the region due to a variety of causes, including demographic pressures, poverty, production and consumption patterns, land tenure patterns and land speculation. This is aggravated with illegal logging, grazing pressures, illegal cultivation, the demand for fuel wood and charcoal, refugee-related problems, oil and mining exploitation, natural climatic events and forest fires. In this respect the rate of afforestation is far less than that of deforestation.

The UN Conference on Environment and Development in 1992 emphasized the contribution of indigenous knowledge to a better understanding of sustainable development. UNCED highlighted the urgent need for developing mechanisms to protect the earth's biological diversity through local knowledge. There is great necessity to conserve the knowledge of the environment that is being lost in communities.

Similarly, the World Conference on Science (Budapest, 1999) recommended that scientific and traditional knowledge be integrated in interdisciplinary projects dealing with links between culture, environment and development in areas such as the conservation of biological diversity, management of natural resources, understanding of natural hazards and mitigation of their impact. Development professionals consider indigenous knowledge as an invaluable and under-utilized knowledge reservoir, which presents developing countries with a powerful asset.

Earth is endowed with diverse biological resources. These resources provide a wide range of natural products such as those derived from bio-prospecting, intermediate products (e.g. natural dyes, colorants, oils, biochemical compounds, medicinal and food extracts, etc) and final products (e.g. timber, handicrafts, nuts, fruits, perfumes, medicines, etc). Many of these products are collected for subsistence use. Some of them have served as an important source of innovation for the pharmaceutical, biotechnology, cosmetic and agrochemical industries.

The oral and rural nature of traditional knowledge has made it largely invisible to the development community and to modern science. Indigenous knowledge has often been dismissed as unsystematic. This leads to extinction of these invaluable treasures which need to be recovered as early as possible.

Over the years, the World Health Assembly has adopted a number of resolutions drawing attention to the fact that most of the populations in various developing countries around the world depend on traditional medicine for primary health care. Traditional medicine is a potentially important resource for the delivery of health care of the rural populations. "Traditional medicine" refers to ways of protecting and restoring health that existed before the arrival of modern medicine, the knowledge of which has been handed down from generation to generation. Humans throughout the ages have relied on plants as the source of food, clothing, construction materials, cosmetics and medicines.

Recent progress in the field of environmental science, immunology, medical botany and pharmacognosy have led researchers to appreciate in a new way the precise descriptive capacity and rationality of various traditional taxonomies as well as the effectiveness of the treatments employed. Developing countries have begun to realise that their current health systems are dependent upon technologies and imported medicine that end up being expensive and whose supply is erratic. Traditional systems of health care have undergone a major revival in the last twenty to thirty years. We can therefore talk of Indian traditional medicine, Chinese traditional medicine, Arabic traditional medicine or African traditional medicine. Each community has its own particular approach to health and disease even at the level of ethno-pathogenic perceptions of

diseases and therapeutic behaviour. In this respect, we can argue that there are as many traditional medicines as there are communities. This gives traditional medicine its diverse and pluralist nature.

The pharmaceutical industry has come to consider traditional medicine as a source for identification of bio-active agents that can be used in the preparation of synthetic medicine. Demands of majority of people in developing countries for medicinal plants have been met by indiscriminate harvesting of spontaneous flora including those in forests. Saving the world's plant resources calls for more protection and management, more research, and an increasing level of public awareness about our vanishing heritage. At present great emphasis has been given on conservation, development, and protection of tropical forest regions and their rich biodiversity.

Therefore, it is necessary to introduce systematic cultivation of medicinal plants in order to conserve biodiversity and protect threatened species. Documentation of medicinal uses of plants is becoming increasingly urgent. Indigenous and local communities are concerned that the rate of knowledge erosion has never been as high as it is in the current generation. Such knowledge erosion poses even more serious threat to the conservation of biological diversity than resource erosion. There is, therefore, an urgent need to formulate an array of incentive measures to ensure that members of the younger generations will want to learn, value, adapt and apply traditional

knowledge, innovations and practices of their elders to make this earth a better place to live.

Recent days' of the United Nations Intergovernmental Panel on Climate Change (IPCC) revealed that the average temperature of the earth's surface has already risen by 0.74°C in the last 100 years. Assuming greenhouse gas emissions continue to rise at current rates, it is expected to increase by an average of about 3°C over the next century. There is expected fundamental changes in rainfall patterns, together with rising temperatures will shorten growing seasons, reducing crop productivity. Thus this global climate change is posing not only a threat but also a significant stress to the vegetation.

Our journal entitles enough scope on these burgeoning issues. Research investigations aimed on genetic manipulation and managerial practices to address or tackle the aspects are given on priority. This June issue has mainly concentrated on characterization of indigenous bio-resources like genetic variability study on brinjal (*Solanum* spp.); using of indigenous and locally adoptable technologies like high density transplanting; study on change in climatic pattern due to human pressure and needs in cities (like Iran); managing of stresses like tolerance to salinity, adaptation of trees to water stress condition and more. We encourage readers to contribute in these major issues.