

SEABUCKTHORN

A Multipurpose Plant Species for Fragile Mountains



Lu Rongsen

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ICIMOD, with its geographical mandate extending to countries of the Hindu Kush-Himalayas region, attempts to facilitate ecologically and economically sound development of mountain areas. The centre carries out its mandate through problem-oriented applied research, knowledge exchange, information exchange, and information reference to government officials. The current phase of work is to identify successful development experiences in mountain regions, to examine the possibilities of their success, and to facilitate replication of such success in other parts of the HKH Region. These success stories cover technological innovations, institutional innovations, and economic management systems.

One such successful experience is the distribution and farming of the fast growing *Seabuckthorn* (*Sarcocolla argentea*). This shrub tree is widely distributed throughout the mountain areas of Asia and Europe and is the preferred species of Asia in higher altitudes.

China, through systematic research, has succeeded in utilizing and managing this species in mountainous and in cultivating them in well-managed, commercial plantations. The Chinese have not only recognized the high value of this species for food and medicinal purposes but have also used it in reforestation and protection of high slopes.

This paper, besides introducing the plant, summarizes the Chinese experience in growing and utilizing *Seabuckthorn*, which is of relevance to other mountain areas in the HKH region. The paper also provides information on the plant's uses, its cultivation, and its propagation. The paper is a valuable source for those people who are interested in the plant's uses and propagation and in the development of mountainous areas. ICIMOD will continue to support the growth and development of mountainous areas in the HKH region.

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Lu Rongsen

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Foreword

ICIMOD, with its geographical mandate extending to countries of the Hindu Kush-Himalayan (HKH) Region, attempts to facilitate ecologically and economically sound development of mountain areas. The centre carries out its mandate through problem-oriented applied research, focussed training, organised exchange, and dissemination of information relevant to mountain development. One focussed activity of ICIMOD in its current phase of work is to identify successful development experiences in mountain regions, to examine the preconditions of their success, and to facilitate replication of such success in other parts of the HKH Region. These success stories cover technological innovations, institutional initiatives, and resource management systems.

One such successful experience is the development and harnessing of the vast potential of seabuckthorn (*Hippophae L.*). This shrub-tree is widely distributed throughout the temperate zones of Asia and Europe and in the subtropical zones of Asia at higher altitudes.

China, through systematic research, has succeeded in utilising and managing wild stands of seabuckthorn and in cultivating them in well-managed, commercial plantations. The Chinese have not only rehabilitated fragile slopes using this soil-building and soil-binding plant but have also used it to manufacture several products of high value.

This paper, besides introducing the plant, summarises the Chinese experience in utilising and cultivating seabuckthorn, which is of relevance to other similar areas in the Hindu Kush-Himalayas where economically viable alternatives are very limited. In this context, it should be pointed that, besides seabuckthorn, there are many more underutilised plant species of potential value about which our present knowledge base is extremely poor. The need for a systematic search for these genetic resources and their underlying ethnobotanical characteristics and their development in an economically and environmentally sound manner will be an important step towards the promotion of biodiversity across these mountain areas. ICIMOD will continue to support this search and build up the knowledge base on underutilised plant resources of mountain areas.

The purpose of this paper is to disseminate the Chinese experience to other parts of the HKH. The paper is complemented by a 20 minute video film that helps generate awareness about the high income potential source for high mountains where not many options with high payoffs exist. Some sensitisation among mountain development agencies has already taken place through the above film and through circulation of the preliminary draft of this paper. Some explanatory work and training activities involving seabuckthorn have also been initiated. These activities are being undertaken as a part of the work under the Mountain Farming Systems' (MFS) Programme of ICIMOD. Professor Lu Rongsen, who has had more than a decade's work experience on seabuckthorn, deserves to be congratulated for this piece of work.

E. F. Tacke
Director General

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