ORGANIC CONVERSION & CERTIFICATION : A STRATEGY FOR IMPROVED VALUE-ADDITION AND MARKETING OF MEDICINAL PLANTS PRODUCTS IN THE HIMALAYAS [1]

MADHAV KARKI *

Background

Medicinal Plants and Human Health : Himalayan sage-scholars of Traditional Medicine have said *"Nanaushadhi Bhootam Jagat Kinchit"* i.e. there is no plant in the world, which does not have medicinal properties. Our ancient scholars are estimated to know the medicinal properties of hundreds of species of plants. It is, therefore, no exaggeration to say that the uses of plants for human health are probably as old as human beings themselves. Even so, the recent dramatic increase in sales of herbal products in global markets underscores the growing popularity of herbal therapies. While this has created new opportunities for the countries, their largely impoverished populace and traditional herbal industry, it also poses unprecedented threats to the very resources on which the industry is dependent besides creating socio-economic imbalances and erosion of spiritual and cultural heritage and knowledge systems.

Medicinal plants form the basis of traditional or indigenous systems of health used by the majority of the population of most developing countries (Bodeker, 2002). In China, India and many other countries in South and East Asia, traditional systems of medicine use thousands of plant species to treat malaria, stomach ulcers, and various other disorders. Farnsworth and Soejarto (1991) have identified more than 119 plant-derived substances that are used globally as drugs [see also Temptesa and King (1994)]. Human ingenuity and experiential learning have enabled the screening of the vast cornucopia of plant diversity to select many that contain efficacious "active principles," for the treatment of several diseases that afflict human society (Table 1).

In this era of the globalization of economies and knowledge systems, the fate of medicinal plants is being determined as never before, by millions of unseen hands, from those of forest collectors to that of titans of food and drug companies sitting in far away places. The growth in demand for phyto-medicines and natural products fuelled by rapid population growth in the South, and high per capita consumption in the North is outpacing the production of these resources on a global scale (Postel, 1994). Furthermore, the rapid rate of extinction of medicinal plants species combined with the rapid loss of indigenous knowledge systems has deep potential consequences for human health.

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* Regional Program Coordinator, IDRC, Canada; South Asia Regional Office, New Delhi.

Table 1

Plant-based Medicinal Drugs

Drug	Source	Disease
Vinblastine	*Vinca rosea*	Hodgkin's disease
Vincristine	*Vinca rosea*	Leukaemia
Tubocurarine	*Chondodendron tomentosum*	Muscle relaxant
Quinine	*Cinchona ledgeriana*	Anti-malarial
Pilocarpine	*Pilocarpus jaborandi*	Glaucoma
Morphine	*Papaver somniferum*	Analgesic
Scopolamine	*Hyoscyamus niger*	Motion sickness
Taxol	*Taxus brevifolia*	Ovarian cancer
Erythromycin	Tropical fungi	Antibiotic

Source : Temptesa and King (1994).

Overview of the Situation in the Himalayas: The Himalayan region is the home for one of the largest reserves of medicinal plant biodiversity. It also has a large number of poor and ethnic populations traditionally engaged and well versed in conservation, cultivation, collection and use of medicinal plants. Poor, especially indigenous people earn their livelihood from the medicinal plants in three ways :

(1) In terms of earning cash income through sale of MAP raw materials;
(2) Partial fulfillment of household needs such as medicine (both human and animal), food, nutrients and minerals; and
(3) As a component of biodiversity to maintain ecological integrity.

The linkage between ethnic community and medicinal plants is traditional, integral and complex and has ample scope for strengthening and enlargement for realizing local, national and global benefits.

Socio-economic Perspective : Throughout the Himalayas, the use of medicinal plants in meeting family's health care and nutrition needs is traditional and embedded in all cultures — a tradition dating back to at least four thousand years. In this respect, it needs no introduction, nor are there major problems of acceptability related to lack of familiarity with the plant, methods of cultivation of many commonly grown plants and technologies required for processing into items of common household uses and value. Medicinal plants are socially acceptable employment avenues for women: Traditionally, women have been the mainstays of medicinal plant-based micro-enterprises because medicinal plant products easily fit within the average daily schedule of women. These typically include medicinal plant raw materials being collected, dried and transported to the market and also trained women employed by Herbal Drug Industry. Medicinal Plants have also been used as a family-based health and livelihood oriented enterprises. Many traditional healers have been running Medicinal & Aromatic Plant (MAP)-based health care system as a traditionally continuing family business. Such industries not only strengthen the social fabric, but also (a) preserves the traditional knowledge, and (b) offers easily adaptable enterprising opportunities for children who can learn the trade from their parents through which they can earn their livelihood into the future.

Protection of Traditional Knowledge : There is an urgent need to protect the fast disappearing medicinal plants-based traditional knowledge, which is still abundant in the Himalayas and its foothills. In fact, the sacred Himalayas are widely believed to be the source of the age-old The Indian systems of medicine called Ayurveda, Amchies, and other numerous uncodified or folk system. The indigenous people of Meghalaya have a rich local health tradition and a large number of traditional healers have been practising indigenous medicine for hundreds of years. If proper values can be added to the traditional medical knowledge-based health and subsistence-oriented MAP applications, a large number of jobs can be created in the rural areas. Even at current level of conversion of traditional knowledge associated with medicinal plants into economic opportunities, enterprise-based application of these resources can account for thousands of jobs in the project areas. Thus, medicinal plants score high in reconciling the need for job-creation and economic growth with the limited educational opportunities available to the poor in the mountain-specific economies as medicinal plant based trade and commercial activities do not need higher levels of education to succeed.

The conversion of socio-cultural traditions and indigenous knowledge into livelihood means and economic opportunities also has the advantage of preserving the rapidly eroding cultural knowledge and practices which are increasingly threatened due to globalization and homogenization of people. Like biological diversity of the Himalayas – the product of millions of years of evolution – we need to protect indigenous knowledge and cultural diversity as well. In the uplands of Himalayas, especially in the areas predominated by shifting cultivation and marginal agriculture, if the means of doing so is by giving economic value to traditional and indigenous knowledge, then that may be the correct strategy to adopt.

Environmental perspective : In terms of biodiversity conservation, MAPs can provide a viable economic and ecological alternative to unsustainable forest exploitation and conversion to shifting cultivation, so that forest vegetation can be protected for their biodiversity, and their many service functions. The growing apathy toward products made from chemical (allopathic) products and unsustainably harvested forest products becoming ethically unacceptable global product have created new markets for quality, certified and organic herbal products. Medicinal plants have the potential to fill these needs as they provide green health alternatives and a number of other eco-friendly products of domestic and industrial usage. Found as trees, shrubs, grasses and vines, these plant species abundantly growing in the Himalayan slopes produce materials with many usage and properties. Its entry into the world food and drug market as the environment friendly (including organic) botanical products is looked upon as an emerging and new opportunity that can help save tropical and subtropical forests by promoting community-based conservation, especially in the uplands. The MAP sub-sector in the Himalayas has immense potential as the sustainable commercialization of medicinal and aromatic plants can benefit the local collectors by providing the higher price for traditionally traded products and by opening up national and global markets for

new products from the Himalayas and other parts of the country. Private sectors stand to benefit by ensuring sustainable supply of quality raw materials to benefit their industry and trade if they can be facilitated to build partnerships with collectors and growers. Medicinal plants can grow in very poor soils and under low rainfall and moisture conditions thus aiding the natural regeneration. There are enormous areas of land including the shifting fallow land on which MAP mixed plantations can be raised. Many of the species are shade tolerant and others are climbers, trees, shrubs and herbs that can be grown in different configurations of crop geometry.

Marketing prospects : The demand for medicinal plants, comprising 162 species, is expected to increase by about 15 to 16% between 2002 and 2005 as per CRPA (Anon., 2000). Medicinal plants conservation, *ex-situ* cultivation and management therefore, can become highly remunerative activities both in financial and economic terms for the small-scale growers. The annual turnover of three of the major Indian systems of medicine, i.e., Ayurveda, Unani and Siddha is estimated to be more than half a billion dollars. The current gap between demand and supply is estimated to 40,000 tonnes, which is expected to rise to 152,000 tonnes by 2005 (Anon., 2000). Not only the plants are in increasing demand by major herbal drug industries as an essential raw materials of their drugs, but also its collection, production, processing, packaging and transportation requires high labour input, which can create employment in job-starved Himalayan states. Collection from wild and selective harvesting in addition to primary processing is mostly done manually, and even at the secondary and tertiary levels, medicinal plants have substantial labour requirements. Moreover, not only do medicinal plant based industries expand jobs, enhancing traditional uses through value added processing can increase cash earnings.

Constraints and Opportunities in Cultivation : Some of the practical applications integrating medicinal plants into traditional farming systems have taken an obligate relationship in backstopping upland agriculture or mountain farming. Himalayan states have a tradition of practising mixed farming systems that includes herbal plants and therefore, conservation and *ex-situ* cultivation of medicinal plants especially applying organic cultural protocols has a great scope internationally. Other important opportunity and advantage of cultivating MAPs include ease of their incorporation in the existing cropping systems due to availability of a large number of species and choice of plant types i.e., trees, shrubs, forbs, vines and their suitability to grown in different eco-physical conditions. To sum up, wild stock management and cultivation of carefully selected species as a mixed, inter or companion crop in agro and farm forestry conditions is feasible and needs to be pursued. However, in order to ensure a good input and service delivery system including marketing cultivation may need to be carried out in selected pockets in an intensive manner.

Potential Benefits from Organic & Certified System of Production

Medicinal plants can provide a range of social and economic benefits at local, regional, and international levels. One emerging opportunity is through a system of organic certification whose aim is to

optimize and maximize the economic potential of certain marketable MAP species, in order to provide a larger economic return from a given area for local growers and collectors, without negatively impacting the resource base of these species. Organic certification does not create imbalance in existing traditional management systems, many of which are based on complex histories of bio-fertilizer use and belief in natural systems. Organic system strives to avoid creating new dependency on market forces and unscrupulous traders. Such relationships can disrupt cultural balance and ethical dealings. Organic certification efforts attempts to minimize any potentially negative impacts of market forces on traditional local use and management of resources by building organic practices on local people's strength and developing necessary technical and managerial capacity, required infrastructure such as indigenous and affordable system of certification and quality monitoring. Some of the criteria and approaches suggested to develop organic certification follow :

1. Promotion and development of production methods using natural and certified inputs and improving agronomic and ecological conditions based on norms which meet national and international norms of organic agriculture some of which are :

- Healthy, residue-free products, and standardized medicinal plants raw materials and products;
- Meeting national and international market standards by disseminating the information prior to cultivation and collections;
- Improving local growing and ecological conditions beneficial to the soils, companion crops and farmers;
- Gradual switching from chemical-based cultivation system to ecological agriculture especially in small and marginal farms;
- Developing and utilizing local knowledge, expertise and skills, especially that of women and tribal communities

2. Proper inspection and certification systems are essential for developing internationally recognized organic products. Local or national legislation and policy support are helpful to support such certification systems. Special emphasis needs to be given to assure this aspect of support systems to the production sector, including contacts and joint ventures with certification and accreditation bodies from potential import countries. Specialized certification and quality assurance systems will be required and implemented with market and industry partners for different products and market sectors. A typical certification cost may average 1 to 2 % of the final producer's price for medium size farms, but certification cost, distribution and certification schemes will have to be adapted to specific local conditions.

3. Previous work on organic and other improved production of MAPs in other countries and further research exchange will be incorporated into the project through partnerships and developing efficient Information and Communication Technology (ICT) systems and study/ research exchange.

Other criteria relevant to certification of sustainable and equitable management of NTFPs based on FSC (Anon., 2000) are :

- Wild harvest management should not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples or local communities. Forest management operations should not impinge upon local communities' existing access to medicinal plants, other NTFPs or forest areas.

- Commercial MAP management or harvest should not negatively impact subsistence utilization and traditional harvesting practices of the commercial species/products. Unless negotiated otherwise with local people, marketing should only be of surplus products, above subsistence needs.

- Forest management should respect the cultural and religious significance of medicinal plant species and forest areas. Harvest of MAP species shall not be conducted in sacred forests, or sites of special cultural, ecological, economic or religious significance, unless with the explicit permission of local community stakeholder groups.

- Detrimental social and cultural changes resulting from the influx of workers to harvest products should be minimized.

- Mechanisms for sharing benefits should be perceived as fair by local community groups, and will adapt to the changing economic conditions of these communities.

- If traditional knowledge is used to develop marketable organic products, informed consent must be received by the traditional or local community prior to the marketing of any product, and mutually agreed terms reached for access to the knowledge and the equitable sharing of benefits arising from its use.

- Forest management should strive to strengthen and diversify the local economy, avoiding wherever possible dependence on extensive collection by allowing working plans as well as micro-plans to include production of high-value medicinal plants such as organic and certified products.

- Forest management operations and processing centres should minimize waste associated with harvesting and processing activities and avoid damage to other natural resources.

- Collectors and small-scale growers should be able to participate in negotiating contracts for the sale of their organic and certified products.

Strategies for conserving-through-use or sustainable commercialization

In recent years increasing attention has focused on the conservation of MAPs through the preservation of traditional cultural practices and developing methods of sustainable use. The approach draws heavily on arguments that ecological concepts and processes should be linked with social processes and perceptions (Ramakrishnan, 1992). Conservation of MAPs can be achieved through *ex-situ* cultivation methods, but this should be balanced with *in-situ* approaches as

authentic species and ecosystems need to be preserved. It is now widely recognized that there is a need to manage and conserve the MAP resources for sustainable economic development and that the best way to achieve this is through local value-addition on the products. Since poor and tribal people depend upon MAPs and other NTFPs for livelihoods and environmental services, and are the first people to suffer when the value of these genetic resources decreases, these marginalized people provide the natural focal point for the conservation through wise use. Organic certification can help meet these needs with better marketing gains and long-term system development.

Organic Cultivation as livelihood activity

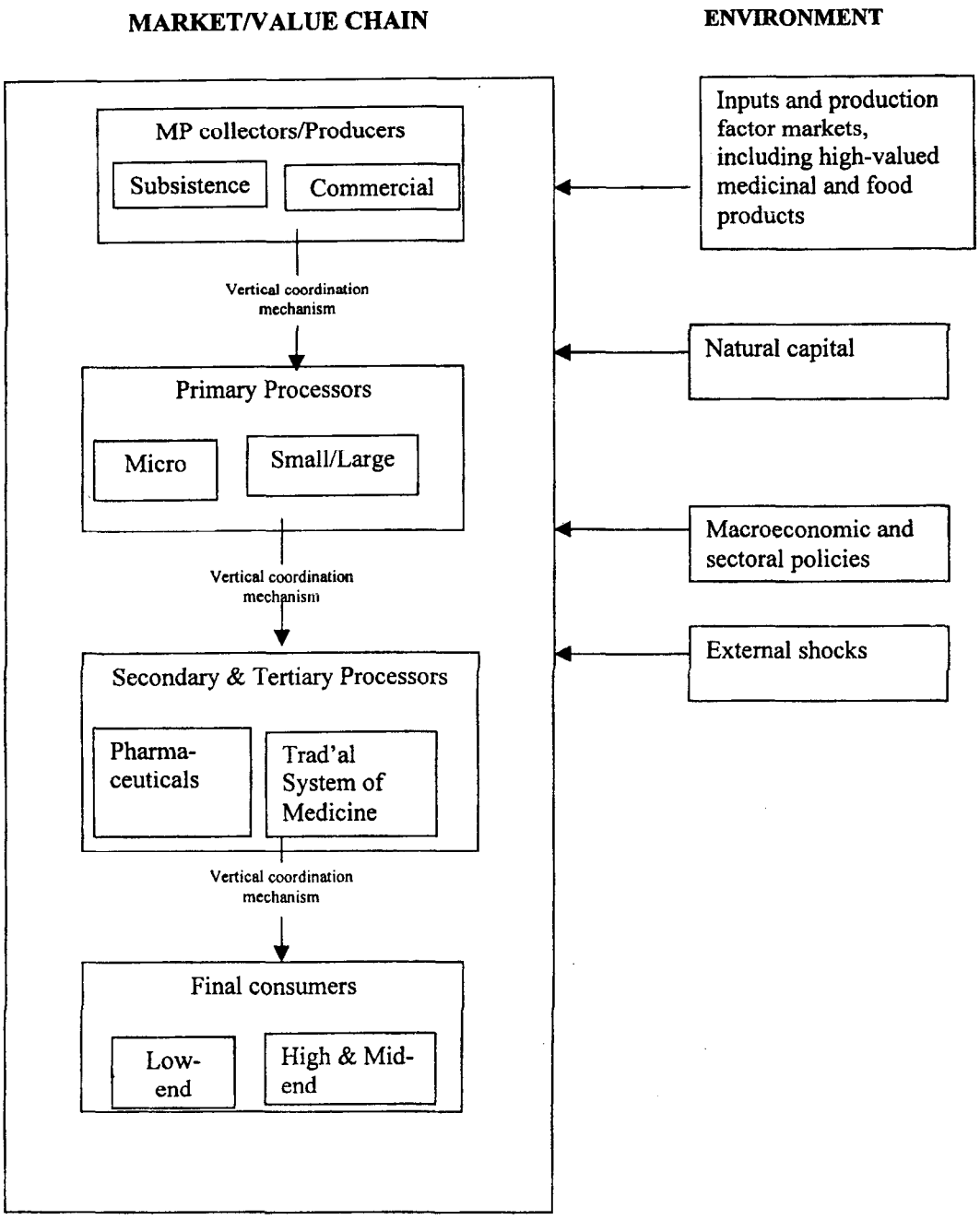
Domestication and cultivation of MAPs should be promoted as an agro-forestry intensification process, combined with investments in a mix of physical, natural, human and social/institutional capital building preferably involving private sector. The level and composition of these investments will be determined in accordance with preferences and opportunities that guide the organic production marketing system development in the country. Private investments should target or combine existing cash crop cultivation or other market-oriented options, a range of non-land-based investments, development of small and micro-enterprises in the areas of organic certification platforms depending upon the opportunities available and local condition. A package of strategic investments is required in MAP sub-sector for an organic market-oriented agro-forestry or forest farming other cultivation intensification process. The performance results should focus on market development and market information system development.

Value or Supply Chain Approach

So far, the importance of poverty and human need factors as they prevail in the Himalayas were highlighted and the potential benefits of organic and certified MAP production and processing indicated. The missing link between MAP conservation and poverty reduction is the promotion of a thriving high quality organic market chain – both nationally and internationally. A market chain includes all the actors that contribute value added to a given primary product; in this case MAPs (Fig. 1). The value or commodity chain approach emphasizes the importance of horizontal coordination among the operators at a given level of the chain as well as of vertical coordination mechanisms between successive levels (cash market, future market, contracts, forward contracts, etc.). It also highlights the importance of a conducive environment as a critical condition for the value chain to grow and be competitive, i.e.:

(a) Favourable natural conditions for producing diverse products,
(b) Presence of other inputs such as research and extension support and other factors of production which are critical for technology adoption,
(c) A stable political and macroeconomic policy environment as well as sectoral policies that provide adequate incentives for the commodity chain operators to invest and allocate their scarce resources in medicinal plant conservation/cultivation and derived products, and
(d) The willingness of the government and the private sector to practice liberalization and fair trade practices.

Fig. 1



A typical 'Market' or 'Value' or 'Commodity-Chain' Framework

Building on the Comparative Advantage of Himalayas

Before starting organic MAP production, it is of paramount importance to ensure that :

(a) There is a significant demand for the organic MAP products,
(b) That region's herbal products are or can become competitive in international markets, and
(c) That the market environment in which the key actors of the value chain are made to operate provides the incentives for further growth.

Moreover, one must assess empirically the willingness of growers to source, adopt and pay for, even partially, for the organic cultivation conversion and technology. It can be hypothesized that this will hinge on :

(a) The net benefit of adopting such a technology,
(b) The distribution of costs and benefits over time and the time discount rate of farmers,
(c) The risk associated with reaping the benefits and
(d) The alternative allocations of resources by the farmer.

Production and Market Barriers

The primary constraints to organic cultivation appear to be socio-economic. Rural areas are relatively well endowed with medicical plant biodiversity but poor in terms of soil health, financial assets, technology and social capital. Chemical soil constraints can be overcome with bio-fertilizer applications and improved agroforestry-legume systems, but risk aversive farmers are known to have low adoption rate. Markets for most of the medicical plant products are based on traditional relationships and are costly to access. In order for collectors and small farmers to invest in medicical plant conservation – that is, make conservation investments – they need to perceive potential benefits, relative to current uses and other investments they could undertake. In order to adopt organic cultivation of medicical plant species these activities must be perceived to serve livelihoods better as compared to alternative practices. Therefore, integration of organic cultivation into a broader livelihood and farming system of the entire players in commodity-chain should be a high priority.

Technology Transfer Challenges

Another important aspect to consider is the development and supply of technology. Pertinent questions are :

(a) Who will pay for research and development investments?
(b) How will the improved technology be transferred?
(c) Which conservers/cultivators will be targeted and how will poor tribals have access to it?
(d) In order to ensure sustainability, who will bear the cost of technology dissemination?

This will require a stepwise approach of addressing that includes :

- An assessment of the market demand at the key levels of the commodity chain;
- An assessment of the level of the competitiveness and comparative

advantage of the medicical plant products in the state;
- An identification and prioritization of key bottlenecks in the commodity chain;
- A cost-benefit analysis of various options to reduce the key bottlenecks identified previously along the commodity value chain;
- Strategic planning and institutional arrangements for improving the performance of the market value chain for high-quality medicical plant products.
- An assessment of the market demand at the key levels of the commodity chain.

A market study would be conducted to assess :

- The size of the final market for the various medicinal plant products at regional, national and international levels;
- The identification of market niches with high growth potential;
- The level and type of competition on these niches.
- This market study should be based on the analysis of secondary data, interviews with knowledgeable experts, and small-scale surveys for specific market niches.

Policy: Learning from China

The Chinese government has prioritized the 'The Chinese System Medicine' (TCM) as an important area of development. This is why TCM is included in its five-year development plans and the Government has drafted a 10-year strategy for development of TCM. The policy of the Ministry of Public Health is to strengthen the village doctors' network and increase the extent to which TCM is used in western medicine hospitals as well as increase the number of TCM hospitals.

Government policy for the industry is implemented by the State Administration of Traditional Chinese Medicine (SATCOM) and has been defined as follows:

- Establishing comprehensive scientific research facilities;
- Expanding R&D of new and improved Chinese medicines;
- Improving the industrial quality of Chinese medicines through technological progression;
- Raising the industry's standards to western levels through GMP;
- Increasing exports to western markets;
- Expanding the use of Chinese medicines in emergency care.

Of the total number of medicinal plants in China, 1000 are in common use. Of these 200 are cultivated and the remaining 800 are wild harvested. Since the liberalization of price controls in the late 1980s, the market for medicinal materials operates according to supply and demand; with the exception of materials that are protected. Particular importance is attributed to the source of raw material. Chinese also consider wild harvested materials to be medically more effective. As a result, high price difference is allowed. The bulk of raw materials use in TCM is traded through well-regulated medicinal material trade centres of which there are eight in the country. The government has placed great emphasis on the importance of GMP since it is seen as a means by which China can reach international standards for pharmaceutical

production. The fact that the Vice-Minister of the MoPH is on the committee responsible fro GMP evaluation illustrates this point.

Conclusion

Organic and certified production of MAPs holds great promise in promoting economic growth and social equity in poverty-stricken but biodiversity rich rural areas of the Himalayas. The existing commercialization system is exploitative, inequitable and unsustainable. A holistic approach based on 'Value-Chain' or 'Commodity-Market Chain' is recommended with stress on market identification, assessment and product prioritization. Lessons learned from different parts of the world including China can provide important lessons and leads for an appropriate strategy to be taken in future.

Therefore, it can be safely argued that there is a great scope for utilizing the vast medicinal plant resources of the Himalayas for improving the livelihoods of poor and tribal communities. However, the quality production and marketing aspects need to be understood and managed properly by building indigenous capacity, providing both adequate incentive measures to enhance production, quality and value-added processing and proper safeguard against the risks of biodiversity loss, unethical trade and loss of intellectual properties.

IDRC, Canada's Role in Medicinal Plants Development in the Himalayas

The International Development Research Centre (IDRC), Canada has a mission to help developing countries use science and knowledge to find practical, long-term solution to the social, economic, and environmental problems they face. Support is directed towards developing an indigenous research capacity to sustain policies and technologies developing countries need to build healthier, more equitable and prosperous societies. IDRC's support for research on medicinal plants began in South Asia in 1994 and is currently provided through the Medicinal and Aromatic Plant program in Asia (MAPPA).

MAPPA was launched on April 1, 1998; initially to focus its activities in South Asia, with existing IDRC funded projects and co-funding support from the Ford Foundation, New Delhi. Currently Canadian International Development Agency (CIDA), and International Fund for Agricultural Development (IFAD), Rome are partnering with IDRC to expand MAPPA, which is a program of strategic research, networking and collaborating to comprehensively address critical research issues related to the sustainable and equitable use of medicinal and aromatic plants in the South and South-East Asia region. Currently, MAPPA activity includes six countries of South Asia, namely China, Nepal, India, Bangladesh, Pakistan and Bhutan.

SUMMARY

The Himalayan mountains are extremely rich in medicinal and aromatic plants (MAPs) wealth. However, due to years of unwise use, the availability of medicinal plant materials in desired quality, quantity, time, and place have become difficult raising serious doubt about the region's potential to be a preferred market destination for the phyto-medicine industry regionally and internationally. The sustainable production, conservation and use of medicinal

plants are influenced by a number of factors, largely of agricultural, socio-economic, technical, institutional and policy nature. Poorly standardized production system, unsustainable and destructive harvesting of the raw materials from wild by untrained and poorly motivated collectors and farmers mostly using primitive methods and lack of awareness about the real potential of the resources are other important factors leading to resource depletion. Local people, especially poor and ethnic minorities, derive a substantial portion of their income and products for their livelihoods and basic health care needs from medicinal plants. This paper presents value-addition through organic production and certification mechanisms as an approach to integrate and address the above issues. The main premise is that medicinal plant resources are natural capital of the country and can improve livelihoods of the state's predominantly tribal people. However, these resources need to be augmented and properly managed following national and international guidelines for standards and quality to ensure their marketing and commensurate benefits to the local people. Knowledge of prevailing national and global market conditions will push for the conversion of these natural resources into quality products, that can generate gainful employment and greater income to collectors and farmers. The suggested strategy explicitly recognizes that : medicinal plant resources being traditionally held natural assets of local communities, decisions to use or conserve natural capital should involve livelihood choices of the local people. Mechanisms need to be developed and broadened to formalize the inclusion of market competitiveness and comparative advantage related strategies. Procedures are needed for production and processing based on the comparative advantage of the region in terms of production capacity, cost-competitiveness, technological base, management quality and business environment. Central to this approach is the application of value or market chain analysis and methods. Opportunities for accessing niche market for certified organic medicinal products could capture price premium in the national and international markets the steps for which the countries of the Himalayan region should take on an urgent basis.

जैविक परिवर्तन व प्रमाणीकरण – हिमालय प्रदेश की औषधीय पादप उत्पादों के परिष्कृत मूल्यवर्धन और विपणन की समरनीति

माधव कर्की

सारांश

हिमालय की पर्वतमालाएं औषधीय एवं सौरभिक पादपों की सम्पत्ति में अत्याधिक सम्पन्न हैं । तथापि, वर्षो अबुद्धिपूर्वक उपयोग किया जाने से अपेक्षित गुणवत्ता मात्रा में समय और ठीक जगह औषध पादप सामग्री अनुपलब्ध होने के कारण क्षेत्रीय और अर्न्तराष्ट्रीय स्तर पर पादपौषधि उद्योग के लिए पसंदीदा बाज़ार गन्तव्य बनाने में इस क्षेत्र की संभावित - क्षमता मे गम्भीर सन्देह प्रकट किए जाने लगे हैं । औषधपादपों का लम्बे समय तक किया जा सकने वाला उत्पादन, संरक्षण एवं उपयोग बहुत सारे कारकों से प्रभावित होता है, जिनमें अधिक प्रभाव कृषि, समाजार्थिक, प्राविधिक, सांस्थानिक और नीतिगत कारकों का पड़ता है । घटिया मानकीकृत उत्पादन प्रणाली, अप्रशिक्षित और अन्य दिलचस्पी रखने वाले संग्रहकर्ताओं और कृषकों द्वारा, जो बहुधा अदिम तरीके उपयोग करते हैं और जिन्हे संसाधनों के वास्तविक संभावित मूल्यवत्ता के बारे में कोई जागरूकता नहीं होती, जंगलों से कच्चेमाल की लम्बे समय तक न चल सकने वाली और विनाशक कटाई किया जाना, कुछ अन्य महत्वपूर्ण कारक हैं जिनकी वजह से संसाधन समाप्त होते जाने की ओर अग्रसर है । स्थानीय लोगबाग, विशेषत: गरीब लोग और जातीय दृष्टि से अल्पसंख्यक जन, अपनी आमदनी और उत्पादों का काफी बड़ा भाग, अपनी आजीविका चलाने तथा आधारभूत स्वास्थ्य रक्षा की जरूरतों के लिए औषध पादपों से ही प्राप्त करते हैं । इस अभिपत्र में उपर्युक्त समस्याओं को एकीकृत बनाने और सुलझाने की दृष्टि अपनाते हुए जैविक उत्पादन और प्रमाणीकरण प्रक्रिया द्वारा मूल्यवर्धन को प्रस्तुत किया गया है । इसकी प्रधान आधारभूमि यह है कि औषधिय - पादप संसाधन देश की प्राकृतिक पूंजी हैं और उनसे राज्य की प्रधानरूप से आदिवासी जनता की आजीविका में सुधार लाया जा सकता है । किन्तु इन संसाधनों को बढ़ाए जाने, और प्रतिमानों और गुणवत्ता के लिए राष्ट्रीय एवं अर्न्तराष्ट्रीय दिशा निर्देशों का अनुसरण करते हुए समुचित ढंग से प्रबन्ध किया

जाने की आवश्यकता है जिससे उनका विपणन और स्थानीय लोगों को समतुल्य उचित लाभ मिलना सुनिश्चित किया जा सके । इस समय चल रही राष्ट्रीय और विश्व बाज़ार की दशाओं का ज्ञान इन प्राकृतिक संसाधनों को गुणवत्ता वाले उत्पादों में परिवर्तित किया जाने की ओर धकेलेगा जिससे लाभकारी रोजगार उत्पन्न होगा तथा वह संग्रहकर्ताओं और कृषकों को ज्यादा आमदनी दिलाएगा । सुझाई गई समरनीति स्पष्ट रूप से यह मानती है कि : औषधीय पादपों के पारम्परिक रूप में स्थानीय समुदायों की प्राकृतिक परिसम्पत्ति स्वीकार किया जाने से इस प्राकृतिक पूंजी को उपयोग करने अथवा संरक्षित करने के फैसलों स्थानीय लागों द्वारा अजीविका चुनाव कराने को सम्मिलित किया जाना चाहिए । प्रक्रिया को ऐसे विकसित और विस्तृत बनाने की आवश्यकता है कि उसमें बाज़ार की प्रतिस्पर्धा सम्मिलित होकर नियमित बन जाए तथा समतुल्य लाभ से सम्बन्धित समरनीतियां भी उसमें रहें । उत्पादन क्षमता, लागत प्रतिस्पर्धा, प्रौद्योगिकीय आधार, प्रबन्ध करने की गुणवत्ता और व्यापार वातावरण दृष्टियों से क्षेत्र का तुलनात्मक लाभ मिलने के आधार पर उत्पादन और विधायन करने की प्रक्रियाओं की जरूरत है । इस दृष्टि का केन्द्रीय बिन्दु यही है कि इसपर मूल्यवत्ता या बाज़ार की श्रंखला वाली विश्लेषण और रीतियां लागू की जाती हैं । प्रमाणपत्र प्राप्त जैविक औषधीय उत्पादों की उपभोक्ता बाज़ारों में पहुंच सकने के अवसरों से उन्हें राष्ट्रीय और अर्न्तराष्ट्रीय बाज़ारों में कीमतों में अधिक लाभ भी मिल सकेगा, जो ऐसे पग हैं जिन्हें हिमालय क्षेत्र के देशों को तात्कालिक आधार पर उठाना चाहिए ।

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