

Spices and herbs for home and market

FAO Diversification booklet 20



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Spices and herbs for home and market

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Preface

The purpose of the FAO Diversification booklets is to raise awareness and provide decision support information about opportunities at farm and local community level to increase the incomes of small-scale farmers.

Each booklet focuses on a farm or non-farm enterprise that can be integrated into small farms to increase incomes and enhance livelihoods. The enterprises profiled in the FAO Diversification booklets are suitable for smallholder farmers in terms of resource requirements, additional costs, exposure to risk and complexity. The products or services generated by the enterprises are suitable for meeting demand on a growing, or already strong, local market and are not dependent on an export market. However in this particular case export markets are considered as they can be a potential lucrative market for small-scale farmers.

The main target audience for these booklets are people and organizations that provide advisory, business and technical support services to resource-poor small-scale farmers and local communities in low- and middle-income countries. It is hoped that enough information is given to help these support service providers to consider new income-generating opportunities and how these might enable small-scale farmers to take action. What are the potential benefits? What are farmer requirements and constraints? What are critical 'success factors'?

The FAO Diversification booklets are also targeted to policy-makers and programme managers in government and non-governmental organizations. What actions might policy-makers take to create enabling environments for small-scale farmers to diversify into new income-generating activities?

The FAO Diversification booklets are not intended to be technical 'how to do it' guidelines. Readers will need to seek more information or technical support, so as to provide farmer advisory and support activities relating to the introduction of new income-generating activities. To assist in this respect,

each booklet identifies additional sources of information, technical support and website addresses.

A CD has been prepared with a full series of FAO Diversification booklets and FAO technical guides, together with complementary guides on market research, financing, business planning, etc. Copies of the CD are available on request from FAO. FAO Diversification booklets can also be downloaded from the FAO Internet site.

If you find this booklet of value, we would like to hear from you. Tell your colleagues and friends about it. FAO would welcome suggestions about possible changes for enhancing our next edition or regarding relevant topics for other booklets. By sharing your views and ideas with us we can provide better services to you.

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Introduction

■ *Spices and herbs*

Spices can be defined as “vegetable products used for flavouring, seasoning and imparting aroma in foods” (FAO, 2005). Herbs are leafy spices, and some, like dill and coriander, can provide both spice seeds and leafy herbs. Many spice and culinary herb plants are widely regarded as having medicinal properties, and there is therefore some overlap between them and Medicinal Aromatic Plants (MAPs). Distinctions can be drawn based on the purposes for which plants are used (see FAO Diversification Booklet No. 17 *Health and wealth from medicinal aromatic plants*). There is also an overlap between spices and herbs, and plants normally classified as vegetables—some vegetables can also be used to spice up other foods— for example in the People’s Republic of China, and in Pakistan, certain types of mushrooms are used as spices (see FAO Diversification booklet No.7 *Make money by growing mushrooms*).

Around fifty spice and herb plants are of global trade importance, but many other spices and herbs crops

are used in traditional cooking, healthcare, or other applications, in particular regions and traded locally. Spices and herbs are grown as trees, shrubs, perennials, annuals, wild and cultivated. Spice and herb plants provide seeds and fruits, leaves and stems, flowers and buds, roots and rhizomes, bark and resins that can all be commercialized in various forms: sold fresh, frozen, dried, whole or ground, distilled into oils or solvent extracted into oleoresins.

There is good trade potential for small-scale farmers where growing conditions are favourable and there is a local market demand for spices and herbs. Farmers can benefit from spices and herbs as higher value, low volume cash crops, to enhance their income and thus improve their livelihoods. A large proportion of spices traded in both local and export markets are produced by small-scale farmers, and the worldwide trade provides multi-billion US dollar earnings for small-scale farmers.

World markets for spices and herbs, particularly in industrializing countries and in local markets,

are expanding and can offer good returns to small-scale farmers. Trade is dominated by dried products. In recent years fresh herbs have become popular and are perceived to be of higher quality. Spice and herb derived essential oils and oleoresins are sold in large and growing markets.

■ *Contribution to livelihoods*

Spice and herb plants do not require large land areas for profitable cultivation and can also be gathered from the wild. In the case of cultivation, growing can be achieved without excessive investments as many spice and herb plants can be produced with minimal inputs of cash, labour and land. They are often an ideal crop to be integrated into small-scale farming systems and are suitable for smaller garden production (see FAO Diversification Booklet No.2 *Livelihoods grow in gardens*).

Spices and herbs as an enterprise can offer additional opportunities for employment within the family and income earned can be used as a 'safety net' in times of need and/or used to pay for medical expenses that the family may require. Cultivations of suitable spice and herb crops can provide extra cash to supplement household income

and improve livelihoods. There is also a good potential for small-scale processing on-farm that can provide value-adding activities and higher income from the sale of processed spices and herbs.

Spices and herbs are a particularly viable enterprise for women as they can conveniently be grown in gardens in and around the homestead,

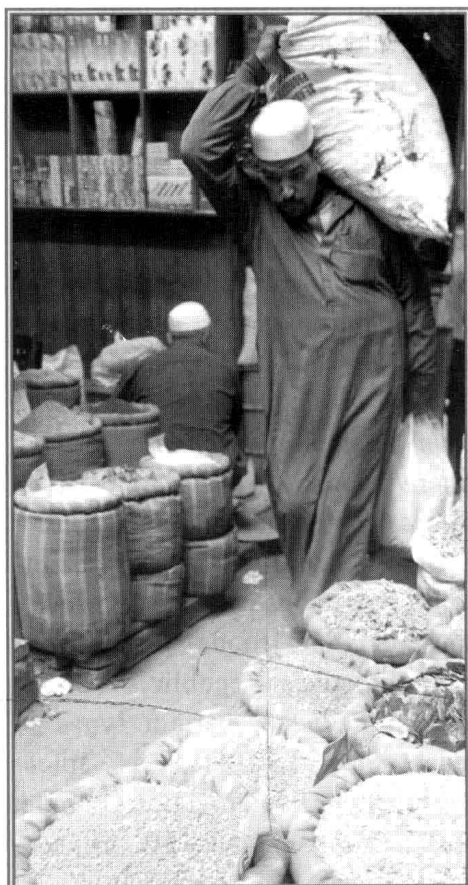


FIGURE 1 *Varieties of spices on sale at a market.*

(Photo: FAO/24691_1163/G. Napolitano)

as well as providing an opportunity for women to start a commercial enterprise and be able to participate in the local economy. The income can be of great support, especially in case of widowhood or abandonment, and the enterprise can have the potential to provide a greater role for women in the family and community.

Spices and herbs can be used in household and personal hygiene products. They also contribute to nutrition, can provide traditional medicinal benefits and can garnish foods making them more appetizing to eat. For example, many street foods the world over are garnished

with herbs and spices (see FAO Diversification booklet No. 18 *Selling street and snack foods*). Spices and herbs can also be used to preserve food (see FAO Diversification booklet No. 5 *Processing for prosperity*).

■ *Market potential*

Local markets for fresh, dried and value added spice and herb products can be developed in competition with imports. Organic and Fair Trade certification is sometimes considered worthwhile for export markets only. However, many African and South American markets have a sizeable local demand for organic products.



FIGURE 2 A women, who is part of a women's group, packaging spices in Nepal
(Photo: FAO/22559/ G. Diana)

This demand comes partly from upper-income local and expatriate consumers, but HIV programmes often recommend eating organic food and this has led to awareness among the general population and additional lower-income demand for organic food crops.

Indigenous plants are now finding new uses given a renewed appreciation for natural products. Local processing can widen the variety of spice and herb crops that may find markets. Central processing plants for oleoresins have been set up in various countries—for example in India and Zimbabwe. Mobile stills operated by contractors allow small-scale farmers to grow essential oil crops without making an investment in distillation equipment.

The production of spices by small-scale farmers has been big business in many countries for centuries. The methods of finance, production, processing, quality control and marketing have been widely studied (for links to research on this see the *Selected further reading* section at the end of the booklet). Local demand in developing countries is largely for spices rather than herbs – taste varies regionally but pepper, curry spices and paprika are mainstay crops. In countries which are not traditional exporters, new production of such



FIGURE 3 Local market sales in Mexico
(Photo: FAO/4182/ F. Botts)

spices, where conditions are suitable, can often compete successfully with imports.

Culinary herbs are less often traditionally produced by small-scale farmers than are spices, though Mediterranean North Africa is an exception to this. Herb production is often mechanized, and good quality is easier to achieve using forced air drying and machine cleaning than by small-scale sun drying and hand sorting methods, as used satisfactorily for many spices. Many culinary herbs originate in temperate/Mediterranean climates, and perhaps

for this reason local markets trade fewer herbs than spices in many developing countries.

■ ***Purpose of the booklet***

This publication aims to create awareness about the potential opportunities and advantages for spices and herbs as a viable

diversification enterprise to enhance the livelihoods of small-scale farmers. The focus is on spice and herb enterprises being integrated into small-scale farming systems, alongside traditional crops and livestock, and/or harvested from wild plants. Opportunities for value addition are also highlighted.

Spices and herbs for improved livelihoods

■ *Spices and herbs at household level*

Spices and herbs can be integrated easily into the framework of many small-scale farmers' households. They can be cultivated in close proximity to the homestead, in either home or market gardens. Culinary spices and herbs require a relatively small area to produce marketable crops, and when added to traditional foods, will provide an appetising nutritional improvement.

Small-scale cultivation of spice and herb crops is particularly

suitable for women as they can tend to herbs and spices close to the homestead. Post-harvest handling at small-scale level is fairly simple and does not require complex operations - fresh herbs can be sold in local retail markets and provide useful additional income for the farm family. Moreover value added processed products can also be developed at this level - condiments, pastes, etc.- with potential to enlarge the enterprise as skill levels and market knowledge develop.



FIGURE 4 *A young man watering chilli pepper and onion plants in his home garden*
(Photo: FAO/22925/ G Bizzarri)

■ **Health, nutrition and medicinal value**

The medicinal attributes of herbs form the basis of traditional healthcare. Medicinal Aromatic Plants (MAP's) are widely documented to have a range of health benefits and cultivation can be beneficial to households and the wider community (see FAO Diversification booklet No. 17 *Health and wealth from medicinal aromatic plants*). For example, rosemary is used to treat headaches, poor circulation and as a natural breath freshener. Bay leaves can be made into an infusion to relieve flatulence and bloating and to help with arthritis. African basil (*Ocimum canum*) can be drunk as a refreshing tea and is used to treat diabetes, as an expectorant to clear throat and lungs, and as a mosquito repellent. Antioxidants are found in many spices and herbs which can contribute to the body's defence against cardiovascular disease and intestinal cancers. Examples include ginger, which is widely used for digestive problems; and fenugreek and garlic, which may help lower cholesterol levels.

■ **Gender focused initiatives**

Women play a very important role in farming households. In addition to domestic work they provide a high proportion of the farm labour. Many

opportunities exist for women in spice and herb cultivation, in small household garden/kitchen processing enterprises, in further value addition and in selling. This enables women, in their own right, to earn income, to involve themselves in trade, create social networks, improve their status in the family and social status in their community and to provide added security to their household in case of abandonment by, or sickness or death of, the husband or other male household members.



FIGURE 5 A women and her spice crop:
sun dried chilli peppers
(Photo: FAO/23072/ R. Grossman)

When organizing training it is important to include women as often their access is limited as preference is usually given to men when inviting participants for training sessions.

■ *Opportunities for the disabled*

Cultivation of plants can be a therapeutic exercise and enables mentally and physically challenged people to contribute to their household. Spice and herb cleaning is relatively light work compared to the labour involved in the cultivation of staple crops. For example, vanilla involves hand pollination and the pods are hand-picked, dried and conditioned before packing; hand cutting of lemongrass leaf into specified lengths for the EU continental loose tea market is another task that can be carried out by less mobile workers. Some seedlings can be grown in raised beds or trays on benches to make it easier for physically disabled or elderly less mobile people.

Where household members are weakened through suffering from HIV/Aids, diversifying into appropriate spice and herb crops can change the nature of the workload and enable them to still contribute to the household. In Rwanda, for example, an NGO, Gardens for

Health¹ has successfully initiated collective small-scale agriculture for groups of people with AIDS to improve their food security and income. The cooperatives operate labour sharing schemes to give rest days and share the burden of work.

■ *Peri-urban and urban agriculture*

Spices and herbs can be cultivated in small urban plots as well as in roof gardens, pots and other areas where cultivation medium may be available. When spice and herb crops are produced in peri-urban and urban areas there is a market on farmers' doorsteps and marketing of fresh spices and herbs to consumers becomes feasible.

The cost of urban land may be high, but often unused land is cultivated informally. Care needs to be taken in the selection of land cultivated, avoiding wetlands, stream banks and catchment areas, and measures taken to minimise erosion and the resultant siltation of municipal water supplies. Adequate planning and guidance is required at policy level to provide a suitable environment plus training and support to ensure good standards of cultivation and hygiene are met.

¹ See www.gardensforhealth.org