

POSSIBILITIES OF OLIVE PRODUCTION IN NEPAL

B.R. Dhakal¹
P. Bartolucci²

ABSTRACT

Olive is naturally grown in its wild form in the western mid-hills of Nepal. Recently cultivated Olive has also been tried from both the Government and the private sector but due to lack of proper technologies and infrastructures, its development is standstill. So, in order to strengthen the national capability for the development of Olive industry, a project TCP/NEP/6713 (A) has come forward.

INTRODUCTION

Olive (*Olea europaea* L.), probably originated from the Mediterranean region, is being used for edible purpose. The tree is evergreen and has very long productive life. The fruits contain around 20 percent oil and have very less cholesterol. The oil is used in cooking, salad dressing, food preparation, massage and for the manufacture of cosmetics, pharmaceuticals, toilet preparation, etc. The mature fruits are also eaten after being processed and preserved in vinegar or salty liquid.

Olive requires a warm but temperate climate. It likes sunny and warm environments for the growth of the plant and fruit. It needs a certain period of winter chilling (12.5 to zero degree Celsius during December through February). The temperature below -5° C for longer period is detrimental to the plant although it can tolerate gradual drop of temperature upto 10° C below zero for shorter span of time. Summer temperature upto 50° C does not harm the tree, provided a minimum amount of moisture into the soil is available. The best Olive production and quality occur in areas having mild winter and long, warm, dry summer to mature the fruit. Olive can be grown in any type of soil but best in sandy loam or loamy soil having pH value with an optimal range from 6.5 to 7.5. Water logging condition should be avoided. Soil should be permeable and should not have hardpan or varying soil texture. The Olive is a xerophytic plant and therefore requires less water than the most cultivated fruit crops but adequate water must be available throughout the season for tree growth and maximum production. Rain at the time of flowering and fruit maturation is not favorable. Much rain during summer encourages the disease infestation and thus reduces the productivity.

¹ National olive Horticulturist, Olive Project, Kirtipur

² International Olive Consultant, Olive Project, Kirtipur

PAST REVIEW AND PRESENT NEED

Wild species of olive such as *Olea cuspidata* and *Olea glanduliera* have been found in the western mountains of Nepal growing naturally since time immemorial. The Hill Agriculture Development Project (HADP) introduced some cultivars (Nabali, Manzanillo, Nuovo) from Israel in 1978 at Horticulture Farms in Kirtipur and Jumla. But, due to lack of sufficient technical know-how, proper management and suitable climatic conditions for the cultivars, plants could not survive. Again, some saplings of Nabali cultivars were planted at Dolpa and Marpha Horticulture Farms in 1980 and some plants are survived. They are giving some fruits although proper cares in training, pruning and other management aspects are not followed. Plants of Rakka and Mission varieties were brought from Japan and planted at Kirtipur Horticulture Farm in 1994 and varieties such as Hamed, Manzanillo, Toffahi, Picual were brought from Egypt and planted at the same farm in 1996. Now the plant growth condition is quite encouraging. Recently, a private enterprise named the Himalayan Plantation Pvt. Ltd. introduced varieties from Italy, France and Himanchal Pradesh of India. These varieties are namely Leccini, Pendolino, Coratina, Cipressini, Nocellara, Tonda ibela, Aglandaou, Bouteillan, Cayon, L' Herault, Picholine Du Gard. They are planted at its 10 hectare farm in Chitlang Village Development Committee, Makawanpur district. Plants are growing satisfactorily.

Nepal has varied ecological zones and micro-climatic areas, which should be benefiting for the cultivation of olive. It is essential to find out and identify the suitable locations for olive growing in this country. Because there are already some wild trees growing, it seems quite reasonable to cultivate olive in the mid-hills and upper mid-hills of the Mid-Western and the Far western Development regions, that would be a boon for the people of these areas to grow crop like olive having low volume and a very high value. For expansion and improvement of olive production, the Government should also provide some subsidy to the farmers growing this new cash crop. The crop should be insured and market channel should be developed. Olive mother orchards comprising various cultivars and propagation units are to be established near the production areas.

FUTURE STRATEGY

In order to strengthen the national capability for the development of olive industry in Nepal in support of existing initiatives for olive oil production. HMG/N and FAO have implemented a project (TCP/NEP/6713 (A)) for the duration from Oct. 1997 to July 1999 with the following aims;

- to prepare an ecozone map of the country identifying potential olive growing areas.
- to introduce appropriate cultivars of olive and establish mother plant collection orchard.
- to install soft-wood mist propagation unit.
- to train and develop technical manpower in the country.

- to introduce components of integrated pest and orchard management
- to introduce farm-level technology for olive oil extraction
- to define national olive oil quality standards
- to form the national olive growers' association.
- to formulate follow-up strategy in support of a sustainable olive production development program in Nepal.

After achieving objectives envisaged in the project document, country foresees adequate number of trained manpower, olive mother plant orchards of cultivars suited to different agro-climatic zones, soft-wood propagation unit, oil extraction technology, etc. The olive saplings would be produced and tested by planting them in different localities already identified and foresees promising areas in the ecozone map. After evaluating the performance of olive growing based on varied parameters, some of the best and the most suitable locations will be selected for the massive expansion of olive culture in future.

REFERENCES CITED

- Godini, A. 1993. Olive growing. General arboriculture, University of Bari, Italy.
- Olive Project Document. 1997. Assistance to the development of olive production (TCP/NEP6713)
- Sloten, D.H.V. 1997. End of assignment report. Hill Agriculture Development Project (HADP), Fruit Development Division, Kirtipur, Kathamandu, Nepal.