



ADAPTING RESEARCH AND GENERATING KNOWLEDGE

The modern organic agriculture movement evolved in developed countries, mostly in temperate regions. Now, with growing interest in organic cultivation as a management method for agricultural production in tropical and subtropical countries, **greater attention needs to be given to developing standards and guidelines for organic agriculture applicable to tropical products and ecosystems.**

Motivation for converting to organic management can include market demand, lack of access to inputs, environmental concerns, social concerns or personal philosophy. In addition, farmers' production targets need to be considered in terms of both quantity and quality, weighing the costs of production against the expected returns. Clear and objective information about both the potential and the constraints of organic agriculture is essential for any farmer contemplating conversion.

Export marketing opportunities for developing countries include those organic horticultural products that are not produced domestically in temperate countries, such as spices and tropical fruits and vegetables.



Tropical and subtropical fruit production takes place in settings ranging from traditional home gardens to large plantations, making it

difficult to prescribe organic husbandry practices that are suitable for all. Nonetheless, any fruit growers contemplating organic conversion need to have a clear understanding of all aspects of organic production and marketing before taking investment decisions.

A challenge for organic fruit producers is the maintenance of economic feasibility while complying with organic standards. This means dealing with crop-specific problems without using substances prohibited by organic standards. Alternative approaches are needed, for instance, to control ripening of pineapples without chemicals, or to control banana or citrus pests and diseases. Furthermore, conversion to organic agriculture requires innovative solutions that guarantee purity of



Organic tropical fruits farm, Samoa



Organic horticulture makes optimum use of crop residues, green manure and biological nitrogen fixation, but this does not replace all nutrients removed by crops. Nitrogen supply needs to be supplemented by the provision of other essential plant nutrients that usually cannot be replenished sufficiently by organic matter in acid tropical soils. **Considering the nutrient demand of perennial fruit crops over time, it is important to have adequate methods to maintain soil fertility, especially levels of phosphorus, potassium and micronutrients, in such a way that yields can be sustained.** There is a strong need to set up networks for sharing empirical experience and scientific results of various organic methods of fertilization, in order to get a more complete picture of long-term successes that can be shared with organic farmers.



seeds and planting material and provide assurance against the risk of pest and disease spread. Some of these problems might have partial local solutions while others require specific research to identify or generate the appropriate permitted management practices.

The Horticulture Crops Group of the FAO Plant Production and Protection Division is currently collaborating with national agricultural research and extension institutions, universities and IFOAM to develop technical guidelines for organic cultivation of fruit in tropical and subtropical regions.

