without spoiling. Freeze dried fruit can be ground into powder and can be an effective addition to chocolate to complement flavours and textures of other ingredients.

- Single origin
  - There is an increasing public awareness in the comparison between the
    enjoyment of chocolate tasting and that of wine. Single origin chocolate
    products provide a range for chocolate connoisseurs to discover flavours,
    origins and processing effects. Single origin products have increased in popularity with chocolate consumers over the last five years as they became
    increasingly aware of the range of possible flavours.

## 18.3.5 Bean to bar chocolate products

Chocolate consumption in both the United States and Europe has been going through a change in perception and processes with a growing number of chocolate shops, bakeries and chocolatiers making their own chocolate from single origin cocoa beans or cocoa mass. Equipment and small quantities of beans are now available to enable the creation of 2–60 kg of chocolate per week on a small scale with modest space requirements. Indeed a small conche can be operated within a shop to attract customers. Once the chocolate is made it can be handled normally and used to create chocolate products to be consumed both on the premises and for retail use. Creating signature chocolate blends can give a greater value to product ranges both in consumer perception and quality output, but there are a number of warnings that should be heeded.

Sourcing beans – cocoa beans in their raw state can come in a variety of sizes (Figure 18.5), conditions and with added contaminants from their origin locations that can cause micro-biological concerns in food production environments. Clear process management and hazard control procedures should be implemented to ensure any risks of contamination are minimised.

Sourcing equipment – Traditional chocolate making methodologies can be employed to the stages of chocolate making from roasting the beans, crushing, winnowing, grinding to the final conching stages. Equipment can be expensive to invest in, whilst some stages can be undertaken with basic processes – such as using domestic ovens for the roasting phase, consideration should be given to the required level of productivity in the longer term, ensuring equipment with the necessary capacity is identified.

Complexities in processing – Bean to bar chocolate products revisit a traditional, artisan methodology for chocolate making, however this is very different to the complex processes that consumers are used to in mature chocolate markets. Grinding in particular plays an important role in providing a good flavour and texture. It is critical to ensure that any purchased equipment can produce a smooth chocolate. Attempts at revisiting traditional chocolate making methodologies should celebrate the origin of ingredients and the artisan nature of the product as a strength over comparisons to large production-scaled confectionery. Origin of beans, quality of bean variety and added ingredients such as cocoa



Figure 18.5 Inspection of dried cocoa beans by hand. Care must be taken to ensure separation of processes and to minimise risk of contamination of the finished product. Reproduced with permission of The Chocolate Tree.

butter, sugar, milk powder and vanilla as well as conching time all add value to and differentiate the final product.

Artisan chocolate making from raw materials is anticipated to play an increasingly important role in mature chocolate markets where growth opportunities are anticipated at the connoisseur end of the market as consumers move towards products and brands with greater transparency and evidence of sustainability. Equipment, ingredients and access to knowledge is likely to become increasingly accessible for small-scale chocolate production to play a role in adding value to existing chocolate and confectionery-based businesses.

## 18.4 Critical considerations

Creating a successful artisan chocolate-based business is not down to any single factor. It is necessary to understand and consider a number of impacting factors that play a role in the decision-making process. The following points need appropriate consideration as they limit or provide guidance to the sort of products created.

## 18.4.1 Ingredients

The quality of the final product will be dependent upon the quality of the ingredients used. Ingredients for commercial products must come with the relevant ingredients and allergen declaration and from credible and traceable sources to