

Chapter 1 *Introduction*

1.1 Introduction

It has been estimated that in 2005 some 1.4 billion people lived in absolute poverty¹ and that almost 1 billion of them were affected by chronic mal- or under-nutrition. Recent food price increases are expected to have pushed many more people – perhaps as many as 100 million – even further into that dire situation. The fight against poverty and hunger is thus a major global concern. Indeed, at the United Nations Millennium Summit of September 2000, world leaders pledged, inter alia, to halve by 2015 the proportion of people living in extreme poverty and hunger.

An estimated 75 percent of the world's poor live in rural areas, and at least 600 million of these people keep livestock to produce food, generate cash income, manage risks and build up assets. With the valuable contribution livestock makes to sustaining livelihoods, especially in rural areas, the development of small-scale livestock enterprises must be seen as a key element of any efforts to eradicate extreme poverty and hunger.

Milk production is an important livestock-sector activity. According to data gathered by the International Farm Comparison Network (IFCN), in 2005 around 149 million farm households throughout the world were engaged in milk production. On average, these households keep two milking cows (or buffaloes) yielding about 11 litres/day. Assuming a mean household size of five to six, some 750 to 900 million people (or 12-14 percent of the world population) rely on dairy farming to some extent.





In view of the above, it is important to assess whether:

- small-scale milk production can contribute to significantly reducing poverty and improving nutrition and food security; and
- small-scale milk producers will be able to compete with large-scale, capital-intensive 'high-tech' dairy farming systems such as those in the USA and other developed countries.

If the answer to both questions is in the affirmative, the promotion of small-scale dairy production may well serve as an important tool for achieving the above-mentioned Millennium Development Goal. Should the response to the second question be negative, however, it is not clear what will happen to the large numbers of people currently making at least part of their living from milk production.

Surviving on an income below the international poverty line of \$1.25/day.

The purpose of the present publication is to help readers gain a better understanding of the global dairy sector, and the opportunities, constraints and threats facing smallholder producers. To that end, the performance of 'typical' dairy enterprises and their external environment, and the impact of potential technical and policy interventions, have been analysed for selected developing and developed countries.

The analytical tools developed by the IFCN form the backbone of the various analyses undertaken, backed up by dairy researchers from 72 countries and over 60 dairy-related companies. The methodological framework is based on the TIPI-CAL Model (Hemme, 2000) and on the concept of typical farms (Richardson and Nixon, 1984). In order to provide the necessary geographic coverage and thereby capture the heterogeneity of dairy production systems across the world, three developed dairy countries (Germany, New Zealand and USA) and ten developing countries (Bangladesh, Cameroon, the People's Republic of China (henceforth China), India, Morocco, Pakistan, Peru, Thailand, Uganda and Viet Nam) were selected for study.

The time frames for some of the analyses differ inasmuch as they draw on past work undertaken by IFCN in cooperation with the Pro-Poor Livestock Policy Initiative (PPLPI). One challenge was to define the time frame for monitoring the global market situation because price fluctuations started to become extreme as of June 2006. In Chapter 2 (global prices) the authors undertook an in-depth review of developments between 1996 and 2007, and incorporated updated information from 2008.

The publication is divided into four main chapters and focuses on:

 Global dairy sector trends: an overview of the global dairy sector and small-scale milk production (Chapter 2)





- Country profiles: profiles of the dairy sectors of selected developing and developed countries, highlighting similarities and differences among the countries concerned (Chapter 3).
- Competitiveness analyses of 'typical' dairy farms, to (a) illustrate the diversity of milk production systems throughout the world, and (b) assess the cost competitiveness of small-scale dairy farming systems in developing countries of Africa, Asia and Latin America vis-à-vis dairy systems in North America, Oceania and Western Europe (Chapter 4).
- A summary of special in-depth studies on small-scale dairy farming undertaken by IFCN in collaboration with the PPLPI (Chapter 5).
- Conclusions and recommendations: overall conclusions with regard to small-scale dairy farming and dairy development policies, and an analysis of strengths, weaknesses, opportunities and threats (Chapter 6).

The authors are well aware of the complexity of the subject but hope the publication will nevertheless contribute to a better understanding of milk production worldwide.







