

# Chapter 44

## Local Production–Based Dietary Supplement Distribution in Emerging Countries: Bienestarina Distribution in Colombia

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### ABSTRACT

*The production and distribution of Bienestarina to the vulnerable population of Colombia is one of the strategies of the Colombian Institute of Familiar Wellness (ICBF) to fight malnutrition, especially among children. This case is a good example of establishing food security and social improvement logistics that merits particular attention. The chapter presents an analysis of the Bienestarina supply chain based on the four elements: steering, organization, development, and financial issues. First, an overview of social improvement logistics and the Bienestarina context is provided. Second, theoretical frameworks related to the case are presented. Third, the case is described on the basis of the proposed analysis framework. Finally, generalization issues and conclusions allow the authors proposing the first characterization of social improvement logistics.*

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## **INTRODUCTION**

Food safety is one of the commitments which the Colombian government wants to ensure as a right of people (Dirección Nacional de Planeación, 2007). Indeed, the government must help the part of the Colombian population who is under malnutrition (i.e. due to nutrient deficiencies in their food), where children are considered as the most affected. Malnutrition of children generates several problems such as lack of concentration, and energy, decreased learning ability, and general delay in physical and mental development, among others (Cuevas García, 2005). To fight malnutrition, different strategies can be implemented by national and regional entities (Food and Agriculture Organization of the United Nations [FAO], 2010). Since several initiatives focus on bringing unused food to the most sensible families (Maldonado & Moya, 2013) or on increasing families revenues, others (mainly in Latin America) deploy dietary complements or enriched food production-distribution systems addressed to those families.

In this context, the main products used to fight malnutrition are based on flours mixtures obtained from cereals that can be locally produced. Indeed, the rates of local (at least national or regional) production for those products are high (Rozo, 2000). However, several reports state that the distribution systems related to those products present deficiencies. It is important to consider those systems in a supply chain management perspective, in order to identify the main processes but also observe the evolutions of the integrated supply-production-distribution chain.

Over 30 years, Colombia has been implementing the strategy to improve food consumption of high nutritional value through the production and distribution of food complement based on mixtures of plant origin with high nutritional content, which is called Bienestarina. The purpose of this complement is to arrive in time to children, young, elderly, poor families, ethnic groups, and other population who require sufficient nutrients which their basic food do not provide sufficiently. Production and distribution of Bienestarina to the vulnerable population of Colombia is one of the strategies of the Colombian Institute of Familiar Wellness (ICBF) to combat malnutrition, especially among children.

The aim of this chapter is to investigate the current state of the Bienestarina logistics process from a supply chain viewpoint and focus on social aspects of logistics which are not related to commercialization of a product but to make it available to sensible populations. The authors start from the theoretical framework of the four pillars of the viability of a logistics project (Gonzalez-Feliu, Malhéné, Morganti, & Morana, 2014) and examine them in the case of the Bienestarina distribution network in Colombia.

This chapter is organized as follows. First, the background and context of the research are presented. Then, the methodological issues are provided. After that, the main results of the research are summarized and discussed. In the conclusion section, practical implications of those results and further developments are proposed.

## **BACKGROUND**

Food security is a major issue since decades and takes a special interest in developing countries, where malnutrition and hunger are one of the first causes of mortality (Valdes, 1981; Reutlinger, 1986). However, food security is in general in competition to the industrialization and performance-making of productive systems and agro-industrial developments of such countries, mainly related either to feed developed countries or to produce non-food agricultural and agro-industrial products, such as biofuels (Ewing & Msangi, 2009) and textile fibers (Fortucci, 2002), among others. In opposition to the devel-

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