Chapter 11

The Potential of Traditional Leafy Vegetables for Improving Food Security in Africa

Praxedis Dube
Wageningen University, The Netherlands

Wim J. M. Heijman
Wageningen University, The Netherlands

Rico Ihle
Wageningen University, The Netherlands

Justus Ochieng
World Vegetable Center, Eastern and Southern Africa, Tanzania

ABSTRACT

Feeding the quickly growing population in Africa remains a global challenge. As the demand for food increases, climate change, on the other hand, poses more challenges to agricultural productivity, implying that the provision of sufficient quantities and qualities of food is threatened. Traditional leafy vegetables (TLVs) in Africa are resilient to adverse weather conditions and are naturally rich in nutrients including vitamins A & C, iron, protein and other micronutrients. The objective of this chapter is to assess the potential of TLVs improving food security in Africa. TLVs represent a robust local source of food, their consumption is crucial in complementing Africa’s diet with micronutrients. TLVs have therefore the potential to play a major role in improving food security and facilitating food sovereignty. Research on seeds, developing seed systems, coupled by preparing and processing methods to TLV products like cakes or flour is needed to increase their consumption, particularly among the young, elite and urban dwellers.

INTRODUCTION

Feeding the quickly growing population in Africa remains a worldwide challenge. Globally, close to a billion people are hunger stricken (Food and Agriculture Organization of the United Nations [FAO], 2015) and approximately one-third of them live in Africa (Sasson, 2012). As the demand for food increases, climate change, on the other hand, poses challenges to domestic food production in Africa, implying that the provision of sufficient quantities of food of the necessary quality is threatened. A lack of sufficient quantities of sufficiently diversified food compromises human health, resulting in an increase
in the risk of contracting diseases related to malnutrition, which affect one in every four people (FAO, 2015). Figure 1 illustrates the prevalence of hunger and the distribution of the undernourished population across Africa. The map reveals substantial differences between African regions. Sub-Saharan Africa is the most severely affected by the prevalence of hunger and undernourishment.

In contrast, Northern Africa accounts for 1% of the undernourished population, as depicted in Figure 2. The differences in undernourishment in Africa are attributed to price volatility, an exploding population, droughts (FAO, 2015), poor governance (Ihle, von Cramon-Taubadel, & Zorya, 2009) and political instability (Veninga & Ihle, in press). For instance, highly volatile food prices affect mainly the poor people in urban and rural areas, since they spend a higher proportion of their limited incomes on their food needs (Luckmann, Ihle, Kleinwechter, & Grethe, 2014). They tend to consume smaller quantities less frequently as well as cheaper and less nutritious foods that lack vitamins, minerals, and other essential micronutrients, e.g. zinc or iron, both of which are required by the human body for healthy growth. This leads to widespread undernourishment. Vegetables, particularly traditional leafy vegetables

Figure 1. Hunger and undernourishment persistence in Africa in 2015
Source: FAO, 2015

Recommend this product to your librarian:

www.igi-global.com/e-resources/library-recommendation/?id=124

Related Content

Social and Environmental Impacts on Agricultural Development
www.igi-global.com/chapter/social-and-environmental-impacts-on-agricultural-development/169699?camid=4v1a

Perception of Romanian Consumers on Ecological Products
Violeta Sima and Ileana Georgiana Gheorghe (2016). Food Science, Production, and Engineering in Contemporary Economies (pp. 203-224).
www.igi-global.com/chapter/perception-of-romanian-consumers-on-ecological-products/152446?camid=4v1a

Real Need of the World in Food: A Future of Agricultural Production
Valentin Sapunov (2020). Handbook of Research on Globalized Agricultural Trade and New Challenges for Food Security (pp. 1-12).
www.igi-global.com/chapter/real-need-of-the-world-in-food/241211?camid=4v1a

The Collective Aestheticization of Farming as Participatory Civic Engagement
www.igi-global.com/chapter/the-collective-aestheticization-of-farming-as-participatory-civic-engagement/233012?camid=4v1a