



806/F

Trends in Global Production and Regional Shifts of Major Pulse Crops: 1961-2013

Parakrama Weligamage

Department of Agricultural Economics and Business Management, University of Peradeniya

Globalization of diets, differences in access to technology, and factor endowments shape production and consumption of agricultural products. Pulse crops, a sub-set of legumes, play a prominent role in global nutrition security as a major ingredient of vegetarian diets and as an accessible source of protein to the poor. Pulses with their varietal diversity and culinary traditions also create cultural values in societies. This study aims a) to explain trends of global and regional pulse production, b) to understand reasons for shifts in regional shares, and c) to understand factors that influenced these changes. Asia, Africa, Europe, Northern America, Oceania, and Southern America were included. Compound growth rates and shares of production, harvested area, and yield of eight groups of pulses between, 1961-63 and 2011-13, were computed and compared. Data were obtained from FAOSTAT Database.

Global pulse production grew at 3.2 percent annually during the period. Area under all pulses grew from 68 to 80 million ha recording an annual growth of 2.3 percent. While Asia continued to be the major pulse producer, their production share declined from 57.4 to 45.5 percent. Production shares of Northern America, Africa, and Oceania increased respectively from 9.0 to 22.3, 2.7 to 9.9, and 0.1 to 4.3 percent. Africa reported the largest absolute production increase of 12 million tons. Shares of Africa, Northern America, and Oceania in global harvested area increased. Dry beans, accounting for 37 percent of area harvested of all pulses, continued to be the leading crop. Global harvested areas of cowpeas, lentils, pigeon-peas, and bambara beans increased while that of dry-peas, broad-beans, vetches and lupins declined. Notably, pulses NES (not elsewhere specified) has reversed the declining trend of area since early 2000.

When compared to that of cereal crops, growth rates of pulses are lower. Annual average global lentil production quadrupled. The share of Asia in lentil production declined from 71 percent to 46 percent, while Northern America's meager global production share of two percent increased to 40 percent. This indicates a shift of production to high productive and profitable larger farms from smallholder dominated Asia.

Keywords: compound growth analysis; additive decomposition; harvested areas; food crop availability; land use

parakw@gmail.com

Tel: +94 777257020