Chapter 11
Technology Transfer to Least Developed Countries Through Global Standards

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ABSTRACT

For the economic growth in least developed countries (LDCs), the transfer of technical and scientific know-how is an uncontested necessity. Poverty and underdevelopment in LDCs are interrelated features. Technology transfers may fail, however, unless varied constraints are taken into account. The focus of this study is on obstacles to an efficient technology transfer to LDCs, and on the major role which global, bilingual standards can play in this process. The global standards setting organizations International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) have recognized the need for a general, comprehensive, and effective support of the LDCs' bodies for national quality infrastructure (NQI). Standardization is not only a vital socio-economic function in itself, but standards represent part of much wider, essential infrastructures. Three stakeholder groups are particularly concerned: the users of the global standards in LDCs, the global standards setting organizations, and the individual National Quality Infrastructure bodies.

INTRODUCTION

At present a process of increasing awareness towards the needs of *underdeveloped countries* can be observed (IEC, 2019,a). Their population has often a low standard

of living, due to low incomes and abundant poverty. It is crucial to understand if world poverty is a *cause* or a *consequence* of lacking development. Indeed if it is a cause, it needs to be directly tackled and, if it is a consequence, the *real causes of the underdevelopment* need to be identified in order to help the poorest countries to develop, and to limit the recurring, uncontrollable migration waves.

It has already been argued that in the process of ongoing globalization usually the industrialized countries are the winners, and LDCs tend to be the losers (Ziegler, 2013). It has also been stated that in our time the term "Third World Country" seems outdated, irrelevant or inaccurate. According to the United Nations Department of Economic and Social Affairs (UN DESA), « LDCs » are Developing Countries (DCs) which exhibit the lowest indicators of socio-economic development and with the lowest Human Development Index ratings. This concept of LDCs originated in the late 1960s, and a country is now classified as such if it meets three criteria (which was the case for 47 countries in 2018).

A poverty-adjustable criterion based on the Gross National Income (GNI) per capita averaged over three years. As of 2018 a country must have a GNI per capita of less than US$ 1,025 to be included on the list, and over US$ 1,230 to graduate from it.

A human resource weakness (based on indicators of nutrition, health, education and adult literacy).

An economic vulnerability (based on instability of agricultural production, instability of exports of goods and services, economic importance of non-traditional activities, merchandise export concentration, handicap of economic smallness, and the percentage of its population displaced by natural disasters).

According to the United Nations Conference on Trade and Development (UNCTAD), the geographical distribution of the above-mentioned 47 LDCs is the following (UNCTAD, 2018):

Africa 33 countries
Asia 9 countries
Pacific region 4 countries
South America and Caribbean 1 country

Regional and global standards are developed in an international setting where the *English language* dominates, but many of the participating member countries do not have that language as their official language. It is a fact that the person who must use a foreign language to communicate can easily feel himself to be in an inferior position in relation to those who can express themselves in their mother tongue, and

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