

Pamela M. D'Onofrio-Flores and Sheila M. Pfafflin., (eds.), *Scientific-Technological Change and the Role of Women in Development*, Westview, Colorado, 1982.

Published for the United Nations Institute for Training and Research (UNITAR) in Westview's special studies in social, political, and economic development, this is a collection of edited papers some of which were first presented at the 1979 United Nations Conference on Science and Technology for Development (UNCSTD). The purpose of this collection is twofold. First, the papers provide preliminary analysis and commentary rather than any definitive conclusions, thus, publication is intended to facilitate access to this ongoing work and to stimulate critical comments. Second, it is hoped that publication will encourage active and equal participation of women in decision making related to applying science and technology in development. The book, therefore, seeks the attention of two sets of audiences: (i) those researchers who are analyzing the impact of applications of science and technology in development on women's roles and (ii) those policy makers with responsibilities for program formulation in this area.

The six chapters in the book cover a diversity of topics and geographic areas ranging from industrialized to developing countries. One paper documents the difficulties of raising consciousness of this issue in international forums. Thus, the chapters lack a strong integrating theme and tend to vary in quality, depth of analysis, and in the extent of documentation.

D'Onofrio-Flores' chapter, "Technology, Economic Development, and the Division of Labor by Sex," is a critique of contemporary Western technology, characterized as male-dominated and male-generated, and, thus, perpetuating inequalities along sex lines. The author succinctly summarizes the basic arguments in the literature for the creation of a new international economic order (NIEO) on the grounds that western technology transfer currently results in dependent development. The author concedes that it is difficult to envision modernization in the absence of western technology. However, citing work in Brazil and Guatemala, D'Onofrio-Flores maintains that the class-bound, patriarchal tradition from which technology stems probably renders it, when introduced unaltered, unable to bring about an equal

development in the social sense, one that meets the needs of the majority of people and is successful in involving them. Bergom-Larsson elaborates this point in her chapter, "Women and Technology in the Industrialized Countries," by illustrating how women suffer from technological development and how the gap between men and women has widened in industrialized countries such as Sweden, Norway, and Denmark.

Tadesse's chapter, "Women and Technology in Peripheral Countries," outlines and carefully documents the basic characteristics of the effects of technological change on women in various work categories: agriculture, plantations, trade and commerce, formal labor market, and service professions. She acknowledges that the long-term improvement in the role women play in developing countries can occur only with a radical restructuring of the use of the existing productive base and natural and human resources. The special needs of women must be considered within that context so that the widening gap resulting from the existing sexual division of labor can be redressed.

Srinivasan summarizes the detrimental effects of selected manufacturing industries, particularly those located in the border towns, in Mexico, where low wage labor is intended to attract U.S. investments and modern technology. Women who are the major labor force recruited into these industries are adversely affected and some policy suggestions are made to improve their situation. Leets documents the difficulties encountered in including the special case of women as a consideration in discussions, agenda recommendations, and reports of international forums, in her chapter "Consciousness Raising in International Fora," i.e., in merely introducing the notion that the issue of changes in women's roles resulting from technological changes is a topic appropriate for special consideration. Her experiences serve to illustrate how much more difficult it is going to be to introduce this concern in the policy measures and programs that are actually implemented. This sentiment is echoed by Pfafflin, who correctly concludes in "Women in Science and Technology After UNCSTD" that the passage of a resolution on women is a welcome development, but that its implementation will require tremendous effort.

Therein lies the problem. Given that change in implementation and policy regarding women seems remote (and the papers in the collection echo this sense), the reader may question what purpose is served by this publication. Nevertheless, a book such as this does make a useful contribution to the literature on scientific-technological change and its impact on the role of women. The papers place the topic in the context of dependency theories of development. In these theories the dissemination of Western science and technology is perceived as widening the gap in development between nations, within regions, classes, and finally-as is more specifically elaborated in these papers-between the sexes. Although not elaborating much that is new, either in the way of theoretical insights or new case study material that illustrates new processes, the papers collectively do provide a state-of-the-art document on this subject. They highlight the need for more explicit attention to the effect of the introduction of science and technology on women, especially on the policy makers.

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