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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

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PARTICIPATION OF WOMEN IN MANUFACTURING: PATTERNS, DETERMINANTS AND FUTURE TRENDS

REGIONAL ANALYSIS, ECLAC REGION

US/RLA/93/129

REPORT*

prepared by

Integration of Women in Industrial
Development Unit

* The opinions expressed in this document are those of the author and do not necessarily reflect those of the UNIDO Secretariat. This document has not been edited.

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PREFACE

The present study is part of UNIDO's efforts to establish a more systematic approach to information gathering and analysis of women's participation in the manufacturing sector and the analysis of the factors that determine their participation. It is believed that this approach will provide a sound base for identifying and designing strategies and action plans to improve women participation in industrial development. This study also represents a contribution to the regional preparations for the Fourth World Conference on Women to be held in Beijing in 1995. The integrated programmes proposed in this study for regional country groups will contribute to the formulation of a regional plan of action to be discussed in Mar de Plata, Argentina, September 25-29, 1994.

The present study undertaken on women in Latin America and the Caribbean used the methodology applied to the global analysis undertaken by UNIDO in 1993, "Women in Manufacturing: Participation Patterns, Determinants and Trends". A conceptual model designed for regional analysis, first applied to the ESCAP region in 1994, was used as an important guideline for selecting variables and indicators required for the analysis. The methodology together with the proposed strategies and action plans and the data base prepared for the analysis are the main outputs of this study.

This work, generously supported by the Government of The Netherlands, has been implemented by the Unit for Integration of Women in Industrial Development of UNIDO, with the cooperation of the Economic Commission for Latin America and the Caribbean, ECLAC. The work was jointly undertaken by an international consultant (Teresa Salazar de Buckle), a regional consultant (Molly Pollack), and the Unit's data processing team (Claudia Barberis, Lyla Mehta, and Stefan Bosnjakovic). A two day validation workshop was jointly organised by UNIDO and ECLAC in Santiago, Chile August 2-3 1994. Selected participants from Argentina, Brazil, El Salvador, Mexico and Jamaica attended the workshop, together with observers from ECLAC, ILO's regional office and Chilean institutions working on the subject of women in manufacturing. (The list of participants to the workshop is included as Annex A.4). The participants to the workshop review preliminary results of the study and actively contributed to strategy design and the formulation of action plans for each of the country groups with the main objective of promoting a more equitable and efficient use of human resources in the industrial development of the region.

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Introduction

INTRODUCTION

The Nairobi strategies for the advancement of women by the year 2000 recognize the links between women's economic progress and the social and economic level of the countries. These strategies provide general guidelines to prepare specific region and country programmes, suitable for diverse objectives and priorities in different stages of development and distinct social, political and economic conditions.

Women are the least utilized resource and it is necessary to merge them into the economy, not only for reasons of fairness and goals of liberation, but to quicken the process of growth in the countries. Such is the perception of donor nations when they aim their assistance policy at the development of women. (Moser, 1989)

The scarcity of adequate information is a serious obstacle for the understanding and analysis of women's conditions and their economic pursuits, and it has hindered the framing and follow up of policies on human resource development. However, some progress has been made in the design of indicators to measure women's economic activity, which has contributed to enhance their visibility and to describe the conditions in which they function. The analysis of such indicators may result in useful implications for the development and welfare of the nations (UNITED NATIONS, 1993)

This study was carried out in close collaboration with ECLAC and represents a contribution from UNIDO/ECLAC to the assessment of the participation level of Latin American and Caribbean women to the economy of the region, particularly the manufacturing sector. Even though the sector is a good source of job opportunities for women it has not been fully explored from the viewpoint of gender participation.

A set of systems was used for the analysis in order to cope with the complexity of the social and economic, industrial, political, demographic and legal environment which surrounds the work of women and the inter relations between the components of the system (see Box 1). A similar approach had been employed in the Global Typology for Women, carried out by UNIDO in 1993. The Methodological Framework is shown on Box 2 and the List of Variables and Indicators on Table 1. The statistical data used correspond in most cases to the latest year available for the period 1989-91.

The Nairobi strategies set forth important challenges relating to the reduction of disparities in participation of women in economic development, the establishment of human resources and the enhancement of women's social condition by the year 2000. Hence, the objective of this study is to find relevant strategies to lessen the disparities of women's participation in the manufacturing sector in the region and in the systems which support it.

This objective concurs with paragraph 89 of the Action Platform (Draft, Annex to Resolution 38/10 by the Commission on Women's Status, Session 38, March 18, 1994) and with Objective 1 of the Action Agenda of the Women's Regional Forum in the Americas: Participation and Development, held in Guadalajara, Mexico, in April 1994, sponsored by IDB, ECLAC and UNIFEM.

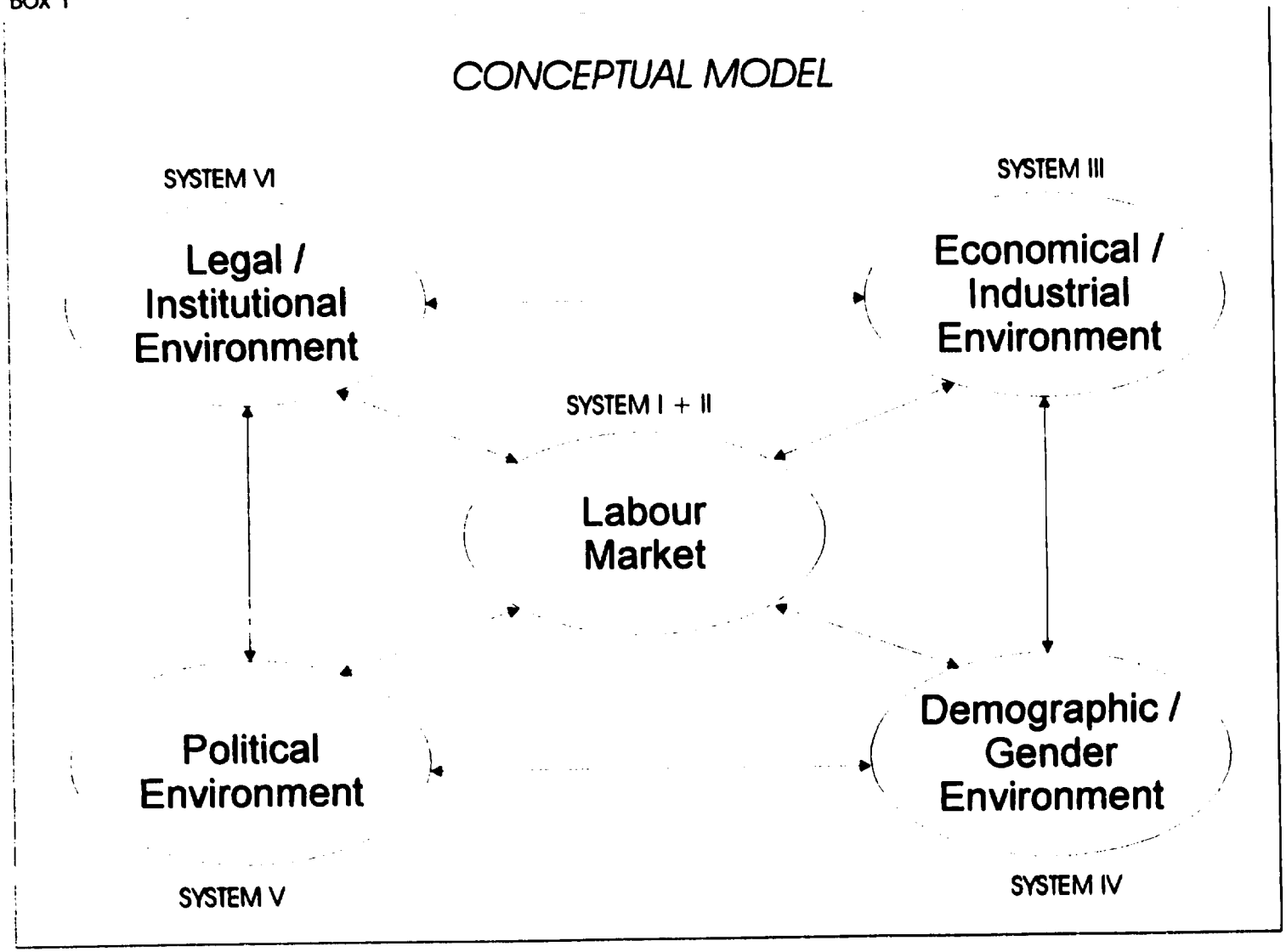
The Conceptual Model permits to design strategies covering several elements of the system; the action plans stemming from it are integrated and inter-related, specific for each participation pattern identified.

The strategies and specific programmes for each pattern will aid in the discussion of proposed actions, at the Regional Conference on Women, in Argentina in September 1994 and the Forth World Conference on Women, in Beijing in 1995.

The multi-variate analysis and the complexity of the system required to create individual data bases for each country. Maintaining these updated will permit to follow up closely the role of women in the manufacturing sector in the region. Hence, these data bases are an additional contribution to enhance the visibility of women in the economy and the information may be used for promoting consideration to them when preparing programmes at national and regional levels.

The report starts with the analysis of the outlook for industrial development in the region and its links with women's participation by the year 2000 (Chapter I). Chapter II describes the features of the legal/institutional, economical/industrial, labour market, demographic and political environments, relative to the manufacturing sector and participation of women. In addition, it explores determinant factors of their role in the manufacturing sector at the regional level. Chapter III surveys and compares the five clusters of countries corresponding to the participation patterns identified in the region. Chapter IV presents the challenges faced by women in each of the clusters and a few global trends of change within the manufacturing sector. Finally, Chapter V proposes strategies and action plans for meeting the challenges and constraints specific to each cluster.

Box 1


CONCEPTUAL MODEL
SYSTEM VI
Legal / Institutional Environment
SYSTEM III
Economical / Industrial Environment
SYSTEM I + II
Labour Market
Political Environment
Demographic / Gender Environment
SYSTEM V
SYSTEM IV

Box 2

METHODOLOGICAL FRAMEWORK

The methodological framework consists of three parts: a conceptual model, identification of variables and indicators, and statistical analysis. The framework is an adapted approach developed by UNIDO for the analysis of industrial systems and sectoral typologies.

A. Conceptual model of women's economic/industrial participation

The underlying premises for the analysis are as follows:

1. Women's economic participation is determined by inter-dependent relationships between a number of systems: economic, social, demographic, traditional culture/religion, political, and legal/institutional.
2. Each system may be represented by a number of variables. The interactions of these variables have a different impact on economic participation of men and women in different age groups, income groups, social groups and household units.
3. Variables within one system may strengthen/weaken/ neutralize The impact of variables in other systems.

B. Identification of variables and indicators

Empirical research, surveys and studies have identified issues relevant to the examination of women's role in economic/industrial development. These issues were expressed as variables and classified under the relevant systems. Statistical indicators were chosen to quantify and systematize information pertaining to the variables. Selection of these indicators relied heavily on conceptual work undertaken by the UN system with regard to gender sensitive statistics characterizing women's economic role. Box 3 shows the list of variables and indicators grouped under the relevant systems. An assessment of the indicators at a country and regional level helped to delineate different patterns of male and female labour force participation in a given time.

C. Statistical tools and analysis

Statistical tools facilitated cross-country comparative analysis of large sets of data which gave a more complete picture of factors affecting the economic role of women. Means, correlations and regressions were calculated to determine the strength/weakness of indicators as well as their relationships. Multivariate statistical techniques were used to approximate groupings of countries sharing similar characteristics of women's economic participation. Results of statistical analysis were verified by qualitative information.

Table 1

LIST OF VARIABLES AND INDICATORS

I. LABOUR FORCE CHARACTERISTICS

Variable 1.1. Size and distribution of Economically Active Population (EAP)

1.1.1. Women's economic activity rate (15 years +) ~
[Economically active female population 15+ / total female population 15+]

1.1.2. Index male/female disparity
[(Male EAP 15+)-(Female EAP 15+) / Male EAP 15+]

1.1.3. Women's economic activity rate (15-64 years)
[Economically active female population 15-64/ total female population 15-64]

1.1.4. Index male/female disparity
[(Male EAP 15-64)-(Female EAP 15-64) / Male EAP 15- 64]

1.1.5. Women's participation rate in the agricultural sector
[Females EAP in agriculture / total female EAP]

1.1.6. Index male/female disparity
[(Male EAP in agriculture - female EAP in agriculture) / male EAP in agriculture]

1.1.7. Women's participation rate in the tertiary sector (commerce and services) ~
[Females EAP in tertiary sector / total female EAP]

1.1.8. Index male/female disparity
[(Male EAP in tertiary sector - female EAP in tertiary sector) / male EAP in tertiary sector]

1.1.9. Rate of Growth of Female EAP (1970 - 1990)

Variable 1.2 Size and distribution of employment

1.2.1. Women's employment rate ~
[Female employment / female EAP]

1.2.2. Index of male/female disparity
[(Male employment - female employment) / male employment]

1.2.3. Women's employment rate in non-agricultural activity
[Female employment in non agricultural activities / female employment]

1.2.4. Index of male/female disparity
[(Male employment in non-agricultural activities - female employment in non-agricultural activities) / male employment in non-agricultural activities]

1.2.5. Women's employment rate in tertiary sector ~
[Female employment in tertiary sector / female employment]

1.2.6. Index of male/female disparity
[(Male employment in tertiary sector - female employment in tertiary sector) / male employment in tertiary sector]

1.2.7. Women's employment rate in services ~
[Female employment in services / female employment in tertiary sector]

1.2.8. Index of male/female disparity

[(Male employment in services - female employment in services) / male employment in services]

1.2.9. Women's Total Employment Rate [Female employment/total employment]

1.2.10. Rate of Growth of Women's employment rate in non-agricultural activity (1970 - 1980)
[Rate = (Vf/Vp) 1/n - 1] Vf = latest year; Vp = first year

Table 1 (Cont.) **LIST OF VARIABLES AND INDICATORS**

Variable 1.3. Employment status	
1.3.1.	Women's self employment rate ~ [Female self employed / female employment]
1.3.2.	Index of male/female disparity [(Male self employed - female self employed) / male self employed]
1.3.3.	Women's unpaid family employment rate [Female unpaid family workers / female employment]
1.3.4.	Index of male/female disparity [(Male unpaid family workers - female unpaid family workers) / male unpaid family workers]
Variable 1.5. Occupational status *	
1.5.1.	Women's participation rate in professional and technical positions ~ [Women in category 0/1 / total female employment]
1.5.2.	Index of male/female disparity [(Male in category 01/1 - female in category 0/1) / male in category 01/1]
1.5.3.	Women's participation rate in administrative and managerial positions ~ [Women in category 2 / female employment]
1.5.4.	Index of male/female disparity [(Male in category 2 - female in category 2) / male in category 2]
1.5.7.	Women's participation rate in non-agricultural activities [Women in category 7+8+9 / female employment]
1.5.8.	Index of male/female disparity [(Male in category 7+8+9 - female in category 7+8+9) / male in category 7+8+9]
1.5.11.	Women's participation rate as clerks [Women in category 3 / female employment]
1.5.12.	Index of male/female disparity [(Male in category 3 - female in category 3) / male in category 3]
1.5.13.	Women's participation rate as sales workers [Women in category 4 / female employment]
1.5.14.	Index of male/female disparity [(Male in category 4 - female in category 4) / male in category 4]
1.5.15.	Women's participation rate as service workers ~ [Women in category 5 / female employment]
1.5.16.	Index of male/female disparity [(Male in category 5 - female in category 5) / male in category 5]
II. INDUSTRIAL LABOUR FORCE CHARACTERISTICS	
Variable 2.1. Size and distribution	
2.1.1.	Participation rate of women in manufacturing ~ [Female EAP in manufacturing / total female EAP]
2.1.2.	Index of male/female disparity [(Male EAP in manufacturing - female EAP in manufacturing) / male EAP in manufacturing]
2.1.3.	Participation rate of women in manufacturing employment ~ [Female employment in manuf. / total female employment]

2.1.4.	Index of male/female disparity [(Male employment in manuf. - female employment in manuf.) / male employment in manufacturing]
2.1.5.	Rate of women's involvement in the food, beverages and tobacco sub-sector (31) [Female employment in 31 / female manufacturing employment (32)]
2.1.6.	Index of male/female disparity [(Male employment in 31 - female employment in 31) / male employment in 31]
2.1.7.	Rate of women's involvement in the textile, garments and leather sub-sector (32) [Female employment in 32 / female manufacturing employment (3)]
2.1.8.	Index of male/female disparity [(Male employment in 32 - female employment in 32) / male employment in 32]
2.1.9.	Rate of women's involvement in metal, machinery and equipment production [electrical appliances (383)] [Female employment in 38 / total female manufacturing employment (3)]
2.1.10.	Index of male/female disparity [(Male employment in 38 - female employment in 38) / male employment in 38]
2.1.11.	Women in manufacturing employment ~ [Female Employment in manufacturing / total manufacturing employment]
III. ECONOMIC AND INDUSTRIAL ENVIRONMENT	
Variable 3.1. Level of economic development	
3.1.1.	Logarithm of GDP/capita * [GDP / national population; indicator for the statistical analysis calculated as follows: [(minX - X (=GDP/capitalog)) / (minX - maxX)]
3.1.2.	Share of the agricultural sector in GDP ~
3.1.3.	Share of the tertiary sector in GDP
3.1.4.	Share of MVA in GDP ~
3.1.5.	Share of exports in GDP
3.1.7.	Inflation rate [mean of price index for last three years]
3.1.8.	Share of government expenditure in GDP
3.1.9.	GDP per capita ~
3.1.10.	Food security index **
3.1.11.	Integrated poverty index ***

* Using the logarithmic values of GDP and MVA leads to a more balanced distribution between countries, whereas otherwise results would be distorted by the considerable differences between rich and poor countries.

** As defined by IFAD. It can take values 0 and above, with 1 being cut off point between countries which are relatively food secure and those which are not.

*** As defined by IFAD. Values between 0 and 1: the closer the value to 1, the worse the poverty.

Table 1 (Cont.) **LIST OF VARIABLES AND INDICATORS**

Variable 3.2. Level of industrial development	
3.2.1.	Logarithm of MVA/capita [(minX - X) / (minX - maxX)]
3.2.2.	Share of manufactured goods in total exports) ~ [Exports of manufactured goods (3) / total exports]
3.2.3.	Share of the food and textile sub-sectors (31 and 32) in total MVA ~ [MVA (31 + 32) / total MVA (3)]
3.2.4.	Share of metal, machinery and equipment products 38 (electrical appliances sector 383) in total MVA [MVA (38) / total MVA (3)] ~
3.2.5.	MVA per capita
3.2.6.	Annual growth rate for industry (1980-90)
3.2.7.	Annual growth rate for services (1980-90)
3.2.8.	Energy consumption per capita (kilograms in petroleum equivalant, 1990)
Variable 3.3. Infrastructure	
3.3.2.	Length of road per 1000 square kilometres
3.3.3.	Number of radio receivers per 1000 inhabitants
3.3.4.	Government expenditure on basic human needs [Government expenditure on social security+housing, water+food / total government exp.]
3.3.5.	Government expenditure on education [Government expenditure on education / total government expenditure]
IV. SOCIAL AND DEMOGRAPHIC CONDITIONS	
Variable 4.1. Size and distribution of population	
4.1.1.	Urbanization [Urban population / total population]
4.1.3.	Index of male/female disparity [Male life expectancy at birth - female life expectancy at birth) / male life expectancy at birth]
4.1.4.	Total fertility (births per woman) ~
4.1.5.	Mean age at first marriage for women [(minX - X) / (minX - maxX)]
4.1.8.	Female headed households [Female headed households / total number of households]
Variable 4.2. Access to education	
4.2.1.	Index of male/female disparity [Male literacy rate - female literacy rate) / male literacy rate]
4.2.2.	Female primary enrolment rate ~ [Female enrolment in primary school / female population of relevant age group]
4.2.3.	Index of male/female disparity [(Male enrolment rate in primary school - female enrolment rate in primary school) / male enrolment in primary school]

Table 1 (Cont.) **LIST OI VARIABLES AND INDICATORS**

4.2.4.	Female secondary enrolment ratio – [Female enrolment in secondary school / female population of relevant age group]
4.2.5.	Index of male/female disparity [(Male enrolment rate in secondary school - female enrolment rate in secondary school) / male enrolment in secondary school]
4.2.6.	Female tertiary enrolment ratio – [Female enrolment in tertiary school / female population of relevant age group]
4.2.7.	Index of male/female disparity [(Male enrolment rate in tertiary school - female enrolment rate in tertiary school) / male enrolment in tertiary school]
4.2.11.	Index of male/female disparity [(Male enrolment rate in technical subjects - female enrolment rate in technical subjects) / male enrolment rate in technical subjects]
4.2.12.	Primary school achievement index – [(Number of years completed)/(standard number of primary school years)]
V. POLITICAL ENVIRONMENT	
Variable 5.1 Distribution of power	
5.1.1.	Parliamentary representation – [Women members of parliament / members of parliament]
5.1.2.	National Machinery for the Advancement of Women *
VI. LEGAL AND INSTITUTIONAL FRAMEWORK	
Variable 6.1. Legal protection **	
6.1.1.	Ratification of the International Convention on elimination of all discrimination against women (CEDAW)
6.1.2.	Ratification of ILO Convention 100 - Equal renumeration, 1951
6.1.3.	Ratification of ILO Convention 111 - Discrimination (Employment and Occupation), 1958 –
6.1.4.	Ratification of ILO Convention 156 - Workers with Family Responsibilities, 1981 –

* Source: Directory of National Machinery for the Advancement of Women. The following scale has been applied:

0 - None;
1 - NGO;
2 - Department in a Ministry;
3 - Ministry;
2.5 - Mixed

** The sources for these variables are Ratifications of ILO Conventions based on the following scale:

0 - not ratified / not indicated;
1 - ratified within the next 10 years;
2 - ratified shortly after

– Indicators used in Cluster Analysis

CHAPTER I

CONTEXT AND PERSPECTIVES OF INDUSTRIAL DEVELOPMENT IN LATIN AMERICA AND THE CARIBBEAN

Without industrial development, economic expansion and employment growth are impossible. Women's integration to the manufacturing sector improves their economic status and social position, insofar as paid employment promotes full autonomy and equality. Employment of women in industry, especially in exporting firms, has been a key factor in the success of many newly industrialized countries (NIEs) (Young, 1993).

In order to develop a framework for the analysis of potential demand for labour and the identification of threats and opportunities for women to the year 2000, this section contains a brief review of major trends in industrial development in LAC countries, as well as an identification of industrial sub-sectors with the greatest possibilities for growth.

Early stages of industrialization in most LAC countries were based on active policies of state intervention oriented towards fostering import substitution and non-traditional exports. In spite of major achievements, this model began to show signs of exhaustion by the seventies. The debt crisis of 1982 revealed numerous structural problems. Among them were lack of competitiveness in heavily protected or subsidized industries, poor management and decision-making investment in firms, and a high degree of macroeconomic instability implicit in the model, for investments and subsidies were often financed with budget deficits, currency emissions and foreign debt.

The LAC industrial sector was hard hit by the adjustment process during the eighties. Average annual growth rates of manufacturing value added (MVA) had reached 6.4% between 1970 and 1980; they fell to -1.1% in the following decade. The process also led to a redefinition of the region's models of development and economic policies.

The new development approach is based on the adoption of more orthodox macroeconomic policies, and also includes structural reforms of markets for goods, services and productive factors. State intervention is drastically reduced, and markets are allowed to operate more freely.

Simultaneously, the LAC countries have participated more intensely in trade negotiations. The Uruguay Round of GATT has led to deeper trade liberalization, as it has made of many domestic policy reforms binding international obligations. The Uruguay Round has extended the range of issues subject to negotiation, including services, foreign investment and intellectual property. According to the GATT Secretariat, the Round can lead to a net growth of 12% in world trade by the year 2005. The largest increases will be in trade in apparel (60%), textiles (34%), agriculture (20%) and processed foods and beverages. The growth of trade in textile and apparel will benefit Asian countries most. LAC countries will gain mainly in natural resource intensive sectors, such as agro-industry, metals and minerals.

Within the LAC region, economic integration has become more dynamic. The Andean Group countries have established a customs union between them. Through Mercosur, Argentina, Brazil, Paraguay and Uruguay have negotiated on the basis for a similar agreement. Chile has negotiated or is negotiating free trade agreements with all major Latin America countries. The agreements of the so-called Group of 3 will establish a free trade zone between Colombia, Mexico and Venezuela; the sub-regional integration of Central America and the Caribbean islands has regained momentum.

Perhaps the most important development is the conformation of a free trade zone between Mexico, Canada and the U.S. starting January 1, 1994. This is so because of the size of their economies, because of the breadth of the obligations acquired by the contracting parties and because it is the first integration process between a developing country (albeit a NIE) and two nations of the OECD. The possibility of extending NAFTA to include the rest of the LAC countries has been foreseen by the U.S., and almost all countries in the region have shown interest in starting negotiations.

An evaluation of the development model that now predominates in the LAC region would be premature, but in recent years both manufacturing and economic activity in general in LAC countries seem to have recovered. Investment rates have risen and the region has received large capital inflows. The World Bank estimates that GDP in LAC countries will grow by 3.4% per annum in the nineties. This is an improvement on the average of 2.0% of the previous decade. However, trade liberalization may lead to a reprimarization of the region's economies, as in effect occurred in Chile in the seventies. The LAC countries must consolidate existing comparative advantages and develop new ones if they aim at strengthening their manufacturing sectors.

Given the very limited possibilities for further import substitution, and because this process is being reversed by trade liberalization, rapid and sustained industrial growth will depend on the behaviour of manufactured exports. These amounted to 33% of the region's total external sales in 1990. Even during the crisis of the eighties manufactured exports kept an average annual growth rate of over 9%. In the short term, the sub-sectors with the best growth prospects are those in which the region already has comparative advantages. Among them, are leather, footwear, iron and steel, chemical products, explosives, and wood and cork manufactures (see Annex A.1).

However, comparative advantages of the region are losing ground to those of the countries of East and South Asia. It is even possible that the elimination of discriminatory trade barriers, such as those imposed on Asian countries through the Multifiber Agreement, may worsen the LAC region's relative access to the markets of OECD countries.

In the medium term, growth of LAC manufactured exports will depend on sub-sectors that benefit from changes in the region's factor endowment (i.e., a more educated labour force) and its special circumstances (i.e., proximity to the U.S. market, trade preferences such as those contemplated in the CBI, ATPA or NAFTA, and the eventual creation of a hemispheric free

trade zone). These elements are also key to the attraction of foreign direct investment, as it has been shown by Mexico's experience since 1989.

In this context, the greatest potential for export growth may be found in high technology, high value added sectors, such as machinery, transport equipment, chemical products, plastics, scientific and technical instruments and pharmaceuticals. In 1989, 40% of the LAC region's manufactured exports belonged to these categories. However, not many LAC countries have attained international competitiveness in high technology goods. In 1989, 90% of the region's high technology exports originated in only two countries; Mexico and Brazil.

To generate new competitive advantages, more than an industrial policy is required. Stable macroeconomic policies, improvement in physical infrastructure, and a better investment climate are needed, along with specific policies for industrial restructuring. Actions must be taken to improve negative tendencies in productivity caused by ill-designed public policies and deficient organization and management of the private sector. The World Bank estimates that total factor productivity (TFP) in the LAC region fell by 1.1% annually between 1973 and 1987; during the same period, TFP in East and South Asia grew at an average rate of 1.2% per year.

These trends can create new opportunities for women in industry. However, in the absence of appropriate policies, strategies and actions to promote women's participation in manufacturing, the result of ongoing changes may not only be the squandering of women's potential contribution to development, but also a loss of the ground they have gained to date.

CHAPTER II

PATTERNS AND DETERMINANTS OF WOMEN'S ROLE IN THE MANUFACTURING SECTOR

The variables that affect women's participation in industry are many and complex. They constitute a system in which labour market, economic / industrial, demographic, political and legal / institutional variables interact. In Box 1, a conceptual model of the interrelation between the several groups of variables is depicted. In the present chapter, this model and its interrelations are interpreted on the basis of the data bank constructed for this study and other pertinent evidence. Table 2.1 contains system characteristics of selected indicators for all countries.

2.1 PARTICIPATION OF WOMEN IN ECONOMIC ACTIVITY AND IN THE MANUFACTURING SECTOR

2.1.1 Characteristics of the labor force

During the last decades, major economic and social transformations have occurred in the LAC region.

Among the most significant is the change in the position of women and their participation in economic activity. Although this process began in the fifties, it is during the eighties that female employment in manufacturing increased by 13% at a time when male participation rates were falling. Currently, a third of the region's labor force is made up of women.

Women's participation in economic activity is not uniform between countries, nor within them. The greatest deviations from the mean are found in Argentina, Venezuela and some Caribbean countries. As a general rule, female participation rates are higher in urban than in rural zones.

A determinant of women's participation in the labor market in LAC countries is age. In 14 Latin American urban zones, the participation rate of women in 1990 was 41.7%, but for women in the 25 - to - 44 year age group it reached 57% (CEPAL, Division de Estadística y Proyecciones Económicas) In other terms, participation rates are highest for women of reproductive age.

Unemployment rates are higher for women than for men, because of higher barriers faced by the former in their access to paid employment. In 1990, the unemployment rate was 8.4% in 14 LAC countries, while it reached 10.2% for women. The largest gap occurs in the intermediate age group, which also has the highest participation rates.

During the eighties, women's participation in the tertiary sector rose, especially in services. 77% of working women are in this sector, of which 59% are in personal services.

Women's participation in agriculture is underestimated by the methodologies used to measure economic activity. Nonetheless female participation is high and concentrated in small productive units. According to official statistics, 7.8% of economically active women work in the region's agricultural sector. However, studies show that female participation in agriculture is over 25% in Central America, 72% in the Ecuadorian highlands and 82% in Paraguay (IDB, 1991, Pollack, 1990, IICA, 1994).

The labor market in the LAC region is segmented; a "modern", or formal sector coexists with an informal sector. Case studies indicate a tendency towards the feminization of the informal sector. Women are concentrated in activities with low barriers to entry and low levels of training, productivity and income. Although employment in the informal sector grew by 20% during the eighties, income levels of its workers fell by more than the average observed for economic activity in the region as a whole (PREALC, 1992). Hence, growth of employment in the informal sector was associated with impoverishment of its workers. Women's participation in the informal sector varies widely; 64.6%, in Cochabamba in 1988, 61% in some Bolivian cities in 1991, between 52% and 62% in Mexico in 1989, 44.2% in Chile and 40.7% in Paraguay in 1990 (Villareal, 1992, Escobar de Pabón, 1993, Berger and Buvinic, 1989, Pollack, 1993). A possible explanation of the feminization of the informal sector is given by the fact that women join the labor force during economic crises, as part of a survival strategy to compensate losses in family income.

A low participation of women in management and administrative positions is common to LAC countries. Only 2% of women hold these positions. The equivalent percentage for men is almost twice as high. In contrast, women's participation in professional and technical categories in higher, reaching an average level of 14%. Variations between countries are slight. Guatemala, with 1.3% and Venezuela, with 24%, being the exceptions. In specific occupations, gender segmentation is observed: women tend to be nurses and teachers, while men are engineers and doctors. In spite of progress in this front, positions which imply decision-making are still predominantly masculine.

2.1.2 Characteristics of the manufacturing labor force.

Women's participation rates in manufacturing industry in the LAC region have been low and stable, with levels close to 16%. In some countries (Colombia, Costa Rica, Honduras, and El Salvador) the share of female employment in industry exceeds 20%.

Table 2.1.

System Characteristics of Selected Indicators for all Countries

COUNTRY	System I				System II	System III						System IV				System V	System VI
	1.1.1.	1.1.7.	1.2.1.	1.2.7.	2.1.1.	3.1.2.	3.1.3.	3.1.4.	3.1.9.	3.1.11.	3.2.2.	4.1.1.	4.1.4.	4.2.2.	4.2.4.	5.1.1.	6.1.4.
Regional Means	40%	70%	87%	59%	13%	16%	54%	13%	$2,707	0.37	40%	56%	3.10	106%	58%	8%	0.077
Andean Countries																	
Bolivia	47%	56%	93%	48%	13%	16%	45%	15%	$819	0.81	4%	51%	4.70	86%	26%	0%	0
Chile	36%	81%	95%	59%	13%	6%	55%	19%	$2,873	0.43	13%	85%	2.70	147%	61%	6%	0
Colombia	30%	74%	87%	52%	21%	16%	49%	20%	$1,300	0.38	33%	70%	2.70	111%	80%	4%	0
Ecuador	33%	69%	94%	48%	14%	13%	47%	22%	$1,181	0.57	2%	56%	3.50	100%	70%	5%	0
Peru	44%	62%	93%	42%	16%	6%	50%	26%	$1,875	0.66	18%	70%	3.30	88%	58%	6%	1
Venezuela	11%	79%	102%	61%	14%	5%	56%	18%	$2,984	0.50	7%	90%	3.60	135%	16%	10%	1
Southern Cone																	
Argentina	29%	79%	76%	67%	16%	6%	56%	22%	$4,673	0.14	28%	86%	2.80	159%	70%	5%	1
Brazil	40%	66%	97%	77%	12%	10%	55%	20%	$2,619	0.50	55%	75%	2.60	111%	22%	6%	0
Paraguay	51%	63%	96%	60%	16%	24%	46%	17%	$1,426	0.42	11%	47%	4.60	81%	38%	3%	0
Uruguay	47%	74%	88%	67%	19%	11%	54%	22%	$3,644	0.20	40%	89%	2.30	135%	64%	6%	1
The Caribbean																	
Antigua & Barbuda	19%					3%	79%	3%	$5,366	0.23	65%		1.70	54%		0%	0
Bahamas	58%		74%		4%	5%			$13,812		69%	64%	2.10	121%	109%		0
Barbados	59%	73%	74%	66%	8%	5%	64%	6%	$6,420	0.06	59%	45%	1.80	127%	94%	4%	0
Belize	29%				10%	17%	51%	13%	$2,412	0.50	24%		4.50	146%	16%	0%	0
Dominica	44%		125%		7%	19%	48%	6%	$2,634	0.50	53%		2.50	50%		13%	0
Grenada	67%				8%	11%	53%	4%	$2,379	0.19	34%		2.90	49%			0
Guyana	33%	72%			9%	35%	43%	12%	$463	0.59	8%	33%	2.60	132%	84%		0
Haiti	49%	33%	80%	20%	6%	36%	43%	12%	$234	0.76	85%	29%	4.70	88%	26%	4%	0
Jamaica	63%	73%	77%	62%	11%	7%	57%	21%	$1,287	0.69	65%	52%	2.70	127%	90%	12%	0
Dominican Republic	31%	85%	75%		10%	18%	55%	14%	$1,046	0.38	76%	60%	3.00	113%	55%	12%	0
Saint Lucia	43%					12%	70%	6%	$3,141	0.36	29%		3.20	145%	22%	0%	0
Saint Vincent and the Grenadines	38%				6%	17%	51%	9%	$1,596	0.40	23%		2.50	49%		10%	0
Suriname	40%	72%			4%	12%	54%	9%	$4,857	0.36	75%	47%	2.60	134%	80%	6%	0
Trinidad & Tobago	45%	72%	77%	53%	11%	2%	46%	13%	$4,319	0.24	29%	65%	2.60	105%	85%	14%	0
Central America & Mexico																	
Costa Rica	35%	76%	95%	62%	24%	16%	55%	17%	$2,106	0.26	24%	47%	2.30	90%	47%	12%	0
Cuba	9%	68%	79%	66%	17%	15%			$1,137	0.26	6%	74%	1.70	113%	103%	23%	0
El Salvador	52%	77%	93%	52%	22%	9%	51%	19%	$1,066	0.29	40%	44%	3.60	140%	15%	8%	0
Guatemala	28%	71%	97%	52%	22%	26%	55%	15%	$1,071	0.67	28%	39%	5.10	74%	22%	5%	0
Honduras	33%	63%	97%	54%	21%	19%	41%	15%	$582	0.52	12%	44%	4.90	114%	33%	12%	0
Mexico	34%	53%	84%	63%	17%	7%	61%	21%	$3,916	0.35	64%	73%	3.20	106%	66%	8%	0
Nicaragua	32%	77%	98%		22%	30%	53%	17%	$434	0.19	9%	60%	4.40	72%	47%	16%	0
Panama	39%	81%	77%	64%	9%	11%		8%	$2,391	0.23	17%	53%	2.90	124%	75%	8%	0

Changes have been more qualitative than quantitative. For example, Export Processing Zones (EPZs) had a threefold growth in their employment in countries such as Brazil, Colombia, Dominican Republic, Mexico and Panama between 1975 and 1986 (Buvinic 1994). The majority of workers in EPZs are women; their participation, in the Caribbean region reaches levels between 70% and 96%. Although women's salaries in EPZs are higher than those offered by other alternatives, wage discrimination against women persists and working conditions are precarious.

Within the manufacturing sector, the greatest concentration of women workers is found in the textile industry, where women represent 46% of total employment.

Next in importance is food, beverages and tobacco, with an average level of women participation of 24%. In Bolivia, Salvador and Honduras, over 40% of female industrial workers are in foods and beverages, while in Colombia and Chile, close to 60% of women workers are in the textile sector (figure 3.11).

Gender segmentation is observed in the type of activity of women in each manufacturing sub-sector. A recent study on Chile concludes that discrimination against women depends on the size of the firm (in sectors with large establishments female participation decreases) and shows itself in segmentation by occupational categories: women constitute a majority in administrative, sales and services jobs. (Abrano, 1994)

Industrial restructuring and incorporation of new technologies do not seem to have altered the division of labor by gender. A study of 17 Chilean firms carried out by ILO demonstrated that modernization has failed to create employment opportunities for women in non-traditional professions and occupations, and did not lead to access to better paid and more responsible jobs. In some cases, men entered jobs once reserved for women, but the opposite process did not take place (Abramo and Armijo, 1994).

2.2 ECONOMIC AND INDUSTRIAL CONTEXT

The countries of the LAC region have an average GDP per capita of US$2701, with a broad variation ranging from a minimum of US$234 (Haiti) to a maximum of US$13,812 (Bahamas). Differences in GDP per capita are associated with the share of manufacturing in total production and exports and global and female participation rates.

The structure of manufacturing production throughout the region is relatively homogeneous. The largest sub-sectors are food, textiles and apparel, which together contribute 42% of the region's MVA. The metalworking sub-sector has a share of 12%, although it exhibits highest shares in the more industrially advanced countries: 22% in Mexico, 23% in Brazil and 42% in Trinidad and Tobago.

However, a mature industrial sector does not necessarily imply greater feminine participation. Some case studies indicate that as the technology used by industry becomes more sophisticated, proportionally more male jobs are created. There are, however, exceptions to this rule. In Mexico the "maquila" system has permitted the incorporation of women workers to the electronic sector, albeit in less than desirable working conditions. (Arriagada, 1994).

2.3 SOCIAL AND DEMOGRAFIC CHARACTERISTICS

In 1990, the LAC region had approximately 460 million inhabitants, of whom half are women. In the previous decades, a massive migration from the countryside to the cities took place, and today the LAC countries are predominantly urban. On average 56% of the population of the region lives in towns and cities, although the urbanization rate varies from 40% to 50% in Central America to a range of 86% to 90% in Argentina, Chile, Uruguay and Venezuela. As a rule urban dwellers enjoy better access to basic services such as health, education and housing. About 60% of the region's population is of working age (15 to 64 years). The life expectancy of Latin American women is longer then that of men, and it increased by 7 years between 1970 and 1990.

The fertility rate of the region has fallen to an estimated level of 3 children per woman for the period 1990-1995. However, major disparities persist. Fertility rates are inversely proportional to urbanization, income and educational levels, and are higher in the Central America subregion and in rural areas.

The average age of first marriage for women has risen to 22.4 years. This variable is inversely correlated with the fertility rate and directly with the size of the female industrial labor force, as many women manufacturing workers are young and single.

The position of women in the household is another socio-demographic variable that influences women labor participation. Women heads of household face greater difficulties in obtaining paid jobs because of the burden of their domestic responsibilities. Because of higher rural-urban migration rates for women that led to a majority of urban population being female, the rise of fertility among teenagers and the erosion of the extended family, the percentage of urban household headed by women has increased in almost all countries in the region (Buvinic, 1994).

Educational progress of the LAC countries is closely associated with their general level of development and has contributed to the advancement of women. The disparities between sexes in education do not exceed 15% (De Vanzo and Haaga, 1991, cited by Cartaya, 1994), in spite of significant gaps in some rural regions, especially where indigenous groups are an important part of the population. The problem would seem to be more of the quality and orientation of education than of availability: almost everywhere the type of education choices made by men and women are markedly different.

2.4 POLITICAL AND INSTITUTIONAL CONTEXT

The eighties was a period of consolidation of democracy for most countries of the LAC region with emphasis on broad participation. At the same time the adjustment process that took place during that period, impoverished their populations, in particular the most vulnerable groups (of which women are a majority) (Facio 1994).

National constitutions contain in most cases frameworks for the protection of individual and collective rights, and there are laws and institutions whose purpose is to protect the interests of women. But it is also necessary to make women's issues a central part of the political agenda and to incorporate the gender dimension in national development plans. Political parties of the region are including more frequently in their platforms issues of relevance to women's needs, and their participation through community programs and activism in matters related to housing, child care, health care, etc; is increasingly taken into consideration by politicians.

The political status of women and women's issues can be measured by their participation in positions of responsibility and by the development of institutions and laws to address their special needs.

In the LAC region women's participation in political institutions has improved slightly. The changes are perhaps most marked at a regional and local level, a process facilitated by decentralization. In the central governments, women's issues receive greater attention, but women have limited access to positions of power. The number of women's seats in Latin America legislative bodies is only 7% of the total. Women reach the lower chambers more easily in countries with bicameral legislatures such as Brazil, Mexico, Uruguay, Paraguay, Dominican Republic and Chile; the reverse occurs in Argentina, Bolivia and Chile (Facio, 1994). A greater degree of progress in women's participation is evident in the judiciary. However, women still face difficulties in acceding the highest levels. According to Facio, only six women have been elected to the Supreme Court or the Constitutional Court of Costa Rica, Guatemala, Nicaragua, Venezuela, Puerto Rico and Panama. In Colombia a woman recently presided the Supreme Court.

In spite of legal and constitutional recognition of the equality of men and women, this principle is not always put into practice. The problem seems to be more of enforcement and execution. The same consideration applies to ratification of international treaties and conventions regarding women's rights. Most countries in the region have ratified the ILO Convention on Discrimination (Employment and Occupation), but the level of compliance is low. Nor has the establishment of specialized institutions dedicated to women's issues (sometimes at a ministerial level, as in Chile, Venezuela and Honduras) been a solution. Usually, these have a low profile, and have been hindered by insufficient budgets and human resources and general lack of political will.

In general terms, the LAC region requires a greater degree of sensitization regarding women's issues and, in broader terms, worker's rights. The social transformations undergone by the region have not been fully assimilated by its political institutions and the gradual adjustment of the legal system to the new reality must take into account women's contribution to development in the working place and in the household.

2.5 DETERMINANTS OF WOMEN'S ECONOMIC AND INDUSTRIAL PARTICIPATION

Results of some of the statistical correlations between the variables considered in the present study are presented in this section. It must be noted that such correlations do not necessarily imply the existence of causal relations, and when these exist, their strength rather than direction is measured. The analysis is organized in terms of relations between systems; and relations within each system.

2.5.1. Relations between systems

As might be expected, there is a strong interaction between the labour market (Systems I and II) and the demographic/gender environment (System IV).

Age at first marriage is highly and positively correlated with women's economic participation and also affects men's and women's participation disparities in the tertiary sector and in managerial positions. The older women are when they marry, the smaller the disparity indices between men and women. This could reflect the fact that single women have lighter domestic burdens and as rule are better placed to compete on equal terms with men.

Fertility does not constitute an obstacle to economic participation among women, but is associated with occupational categories. Women with more children are more prone to work in sales (with lower productivity, income, responsibility and training requirements) than as office workers. Education is positively correlated with rates of economic participation and also with women's access to quality jobs. In countries where women have higher levels of education, they are less likely to be unemployed, or to work as self-employed, non-salaried family workers or saleswomen. Higher education of women is negatively correlated with their participation in the personal services sector.

The variables that make up the economic / industrial environment (System III) also show interesting correlations with the structure of the labour market. Both the absolute level of GDP per capita and its rate of growth are associated with the distribution of women workers by occupational categories. Both variables are negatively correlated with women's participation as self-employed and sales workers.

High positive correlation values were found between women's participation in professional and technical jobs and the proportion of women participating in politics. This is more valid in cases were disparities between men and women are smaller.

Public expenditure on social needs correlates with fertility rates (it reduces them) and on women's access to primary, secondary and university education (it increased them).

2.5.2 Relation within systems

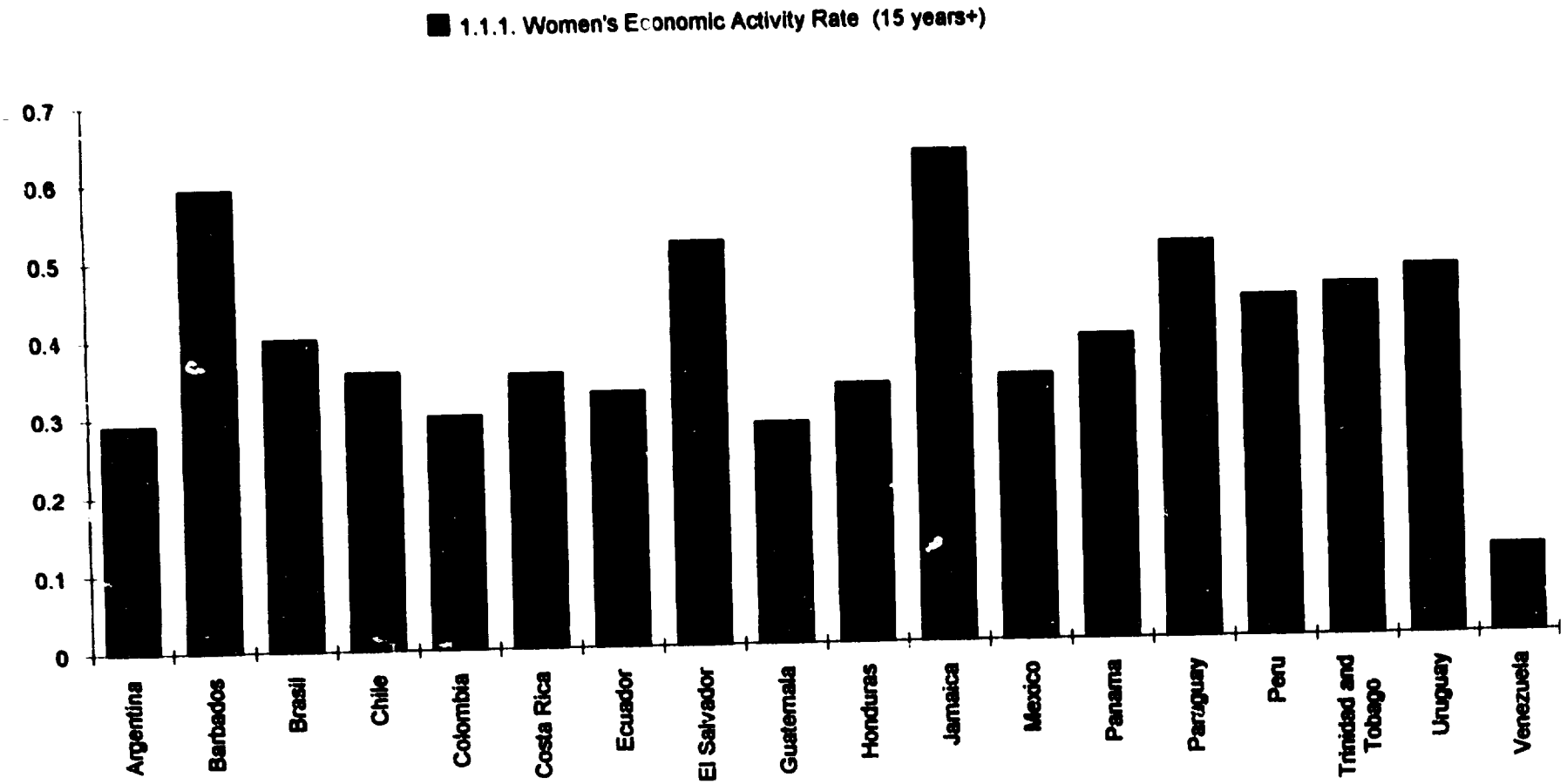
A high negative correlation was found between women's employment rate and disparities (M/F) and employment (-0.79). This means the greater the female employment is, the smaller the disparities (M/F).

In the demography / gender environment, education, average age of marriage and share of households headed by women are negatively correlated with fertility. Rates of urbanization are positively associated with access to primary education.

2.5.3 Gender disparities

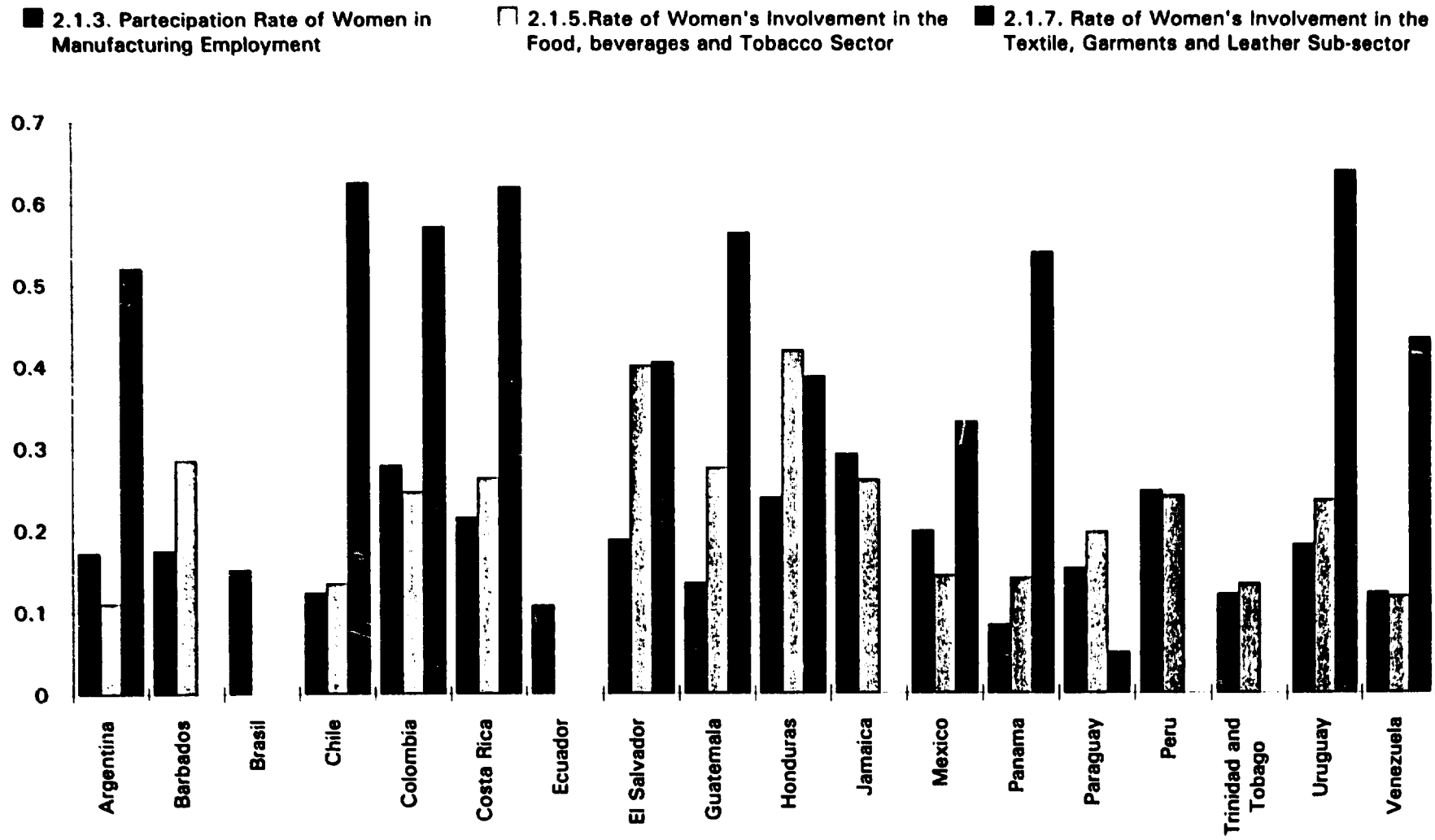
Gender disparities have a strong negative correlation with women's employment in the manufacturing sector, as they do with women's employment in the tertiary sector, and with professionals and technicians in the manufacturing sector. These correlations constitute empirical evidence of the relationship between the reduction of gender disparities and the increase of women's participation in manufacturing.

Figure 2.1



Source: ILO

Figure 2.2



Source: ILO

CHAPTER III

PATTERNS OF WOMEN'S PARTICIPATION IN THE MANUFACTURING SECTOR

3.1 THE METHOD

The multi-variate cluster analysis used in this study permitted the conformation of groups of countries with similar characteristics in the six systems within which women's participation in industry takes place (see Box 1).

This analytical technique has advantages over other classification methods that use in an independent manner geographic, social, economical or political indicators. Being multivariate, the technique considers simultaneously a large number of indicators, thus permitting a more comprehensive evaluation of women's participation.

Through the cluster method, patterns of female participation can be identified, as well constraints and opportunities for the improvement of women's status in the labour market. On the basis of each pattern, specific strategies for each group of countries can be designed which seek to simultaneously eliminate major obstacles in order to maximize the potential impact of each action.

The cluster analysis was undertaken following the methodological sequence set out in Box 2. The final selection of indicators was based on the results of factor analysis and multiple correlations within the restrictions placed by availability of information. Table 3.1 presents the regional and cluster means of the 32 indicators selected for the analysis. Annex 5 presents the individual country values for each cluster.

Figures 1 to 10 help to illustrate the distinguishing features of each cluster to facilitate a cross-cluster comparison. These figures allow a two-dimensional comparison of clusters. One dimension shows to what extent the mean values of cluster indicators change for 18 countries with a mean of zero and a variance of 1. The other dimension shows how these deviations differ across clusters.

3.2 CLUSTERS

Complete statistical information for the 32 selected indicators was available only in 18 LAC countries. Five patterns of women's participation were identified which correspond to the following clusters:

Cluster 1: Chile, Panama, Venezuela, Argentina. Countries with an established industrial base and a high level of GDP per capita. However, women's participation in economic activity and manufacturing is well below the regional average and the indicators of M/F disparity are the highest in the region.

Table 3.1. **Regional / Cluster Mean Values of Selected Indicators**

	Indicator	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Region
1.1.1	Women's economic activity rate (15 +)	29%	40%	38%	40%	61%	41%
1.1.7	Women's participation rate in the tertiary sector	60%	70%	70%	64%	73%	71%
1.2.1	Women's employment rate	88%	92%	96%	88%	76%	87%
1.2.5	Women's employment rate in tertiary sector	82%	78%	69%	77%	73%	76%
1.2.7	Women's employment rate in services	63%	55%	52%	65%	64%	60%
1.3.1	Women's self employment rate	12%	17%	23%	10%	8%	14%
1.5.1	Women's participation rate in professional & technical positions	16%	15%	8%	16%	11%	13%
1.5.3	Women's participation rate in administrative & managerial positions	2%	2%	2%	2%	3%	2%
1.5.13	Women's participation rate as sales workers	15%	19%	23%	14%	18%	18%
1.5.15	Women's participation rate as service workers	34%	27%	23%	20%	27%	26%
2.1.1	Participation rate of women in manufacturing	13%	19%	22%	13%	10%	15%
2.1.3	Participation rate of women in manufacturing employment	13%	20%	19%	16%	23%	18%
2.1.11	Women in manufacturing employment	25%	34%	35%	32%	42%	33%
3.1.2	Share of the agricultural sector in GDP	8%	14%	18%	6%	6%	11%
3.1.4	Share of MVA in GDP	17%	21%	16%	18%	13%	17%
3.1.9	GDP per capita	$3,478.19	$1,828.41	$767.15	$2,902.51	$2,454.78	$2,286.21
3.2.2	Share of manufactured goods in total exports	16%	22%	27%	49%	62%	35%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	35%	48%	48%	33%	49%	43%
3.2.4	Share of sub-sector 38 in total MVA	10%	8%	7%	29%	13%	14%
4.1.4	Total fertility (births per woman)	3.00	3.25	4.60	2.93	2.25	3.21
4.2.2	Female primary enrolment rate	141%	101%	109%	107%	127%	117%
4.2.4	Female secondary enrolment ratio	61%	59%	24%	64%	92%	60%
4.2.6	Female tertiary enrolment ratio	10%	6%	2%	4%	112%**	26%
4.2.12	Primary school achievement index	82%	80%	62%	70%	86%	77%
5.1.1	Parliamentary representation	7%	6%	8%	9%	8%	8%
6.1.3	Ratification of ILO Convention 111 *	1.50	1.00	0.00	0.67	1.00	83%
6.1.4	Ratification of ILO Convention 156 *	0.50	0.33	0.00	0.00	0.00	17%
	Disparity Indicator (- is in favour of men; + in favour of women)						
1.1.2	Index in EAP (15+)	-0.58	-0.33	-0.46	-0.48	-0.11	-0.39
1.1.8	Index EAP part. rate in the tertiary sector	-0.35	-0.40	-0.21	-0.30	0.40	-0.17
1.2.2	Index in employment rate	-0.60	-0.37	-0.54	-0.49	-0.19	-0.44
2.1.2	Index in part. rate in manufacturing	-0.63	-0.38	-0.14	-0.51	-0.21	-0.38
2.1.4	Index in part. rate in manuf. employment	-0.66	-0.49	-0.39	-0.53	-0.19	-0.45

* Dummy variable, scale 0 - 2

** No explanation for such high value

Cluster 2: Colombia, Paraguay, Ecuador, Peru, Costa Rica, Uruguay. Countries with an agricultural/industrial type of economy with diversified female participation in economic activities similar to the regional average.

Cluster 3: El Salvador, Honduras, Guatemala. Low income countries with relatively large agricultural and incipient industrial sectors, and a high level of self-employment among women. This group exhibits the highest participation of women in the manufacturing sector.

Cluster 4: Brazil, Mexico, Trinidad and Tobago. Exporters of high technology[1] goods and/or petroleum. Women's participation is high in tertiary and service sectors.

Cluster 5: Barbados, Jamaica. Caribbean islands with small, very export oriented, industrial sectors. Women's economic participation is high and M/F disparity are the lowest in the region.

Although other LAC countries could not be included in the cluster analysis, a brief description of Cuba (of special interest as the only centrally planned economy in the region), Haiti (the poorest country in the region) and the small Caribbean island countries concludes this chapter.

3.3 MAJOR CHARACTERISTICS OF CLUSTERS

CLUSTER 1: Chile, Panama, Venezuela, Argentina

Cluster 1 includes two countries of austral South America, a major Andean oil exporter and a Central American country whose economy has been strongly influenced by the interoceanic canal it harbours.

The GDP per capita of this cluster is relatively high. However, the cluster is below the regional average in its share of MVA in GDP, and of manufactures in total exports. This would seem to indicate the importance of natural-resource based activity in these countries, and in Panama, service activities related to the canal and the financial sector.

The structure of the manufacturing sector of this cluster is also atypical for LAC. The participation of both food, textile and apparel (35%) and metalworking (10%) are lower than that found in the region as a whole.

The implementation of integration schemes such as the Andean Group and MERCOSUR, to which Venezuela and Argentina respectively belong, as well as the strengthening of free trade

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[1] Chemical, medicinal and pharmaceutical products, plastic materials, non-electrical machinery and spares, transport equipment, professional, scientific and control instruments.

or preferential trade agreements between Chile and Mexico, Venezuela and Colombia is expected to accelerate growth in manufacturing and services. EPZs in Chile and Panama also have potential for creation of new jobs, and currently 50% of their workers are women.

The cluster has the highest coverage of primary education in the region, but is close to the regional average for the secondary and tertiary levels. The fertility rate of 2.7 births per woman is lower than the regional average of 3.2. This indicator combines two very different patterns; in Chile, Argentina and Panama, the number of children per woman is below 3, while in Venezuela the figure is closer to four. The cluster has medium indicators of life expectancy at birth, households headed by women and the integrated poverty index.

In the political and institutional fields, the cluster is close to the regional average in terms of women's representation in legislatures. Chile and Venezuela both have ministries for women's affairs. In Argentina, a system of minimum quotas for women in electoral lists was applied to political parties that participated in the National Constitutional Assembly. This experience should be studied in order to determine its eventual extension to other countries of the region. All countries in the cluster ratified ILO Conventions 111 and 156, but the execution of these and of constitutional provisions that protect women is often hindered by inconsistency with other laws and regulations.

Perhaps the most notable characteristic of this cluster is that women's economic activity rate is only 29%, the lowest of all groups. This seems to be due to the particularly reduced level of women's participation registered for Venezuela, 11%. As women's employment rate in manufacture for the cluster is below the regional average (13%), it is not surprising that women's employment rate in the tertiary sector reaches 82%, compared with a regional mean of 77%. Women are more likely than in other countries of the region to work as professionals or technicians than as sales and services workers.

Cluster 1 has the largest M/F disparities in the region all favourable to men. The profiles of this cluster are shown in figures 3.1 and 3.2.

Figure 3.1

CLUSTER CHARACTERISTICS
Cluster 1: Chile, Panama, Venezuela, Argentina

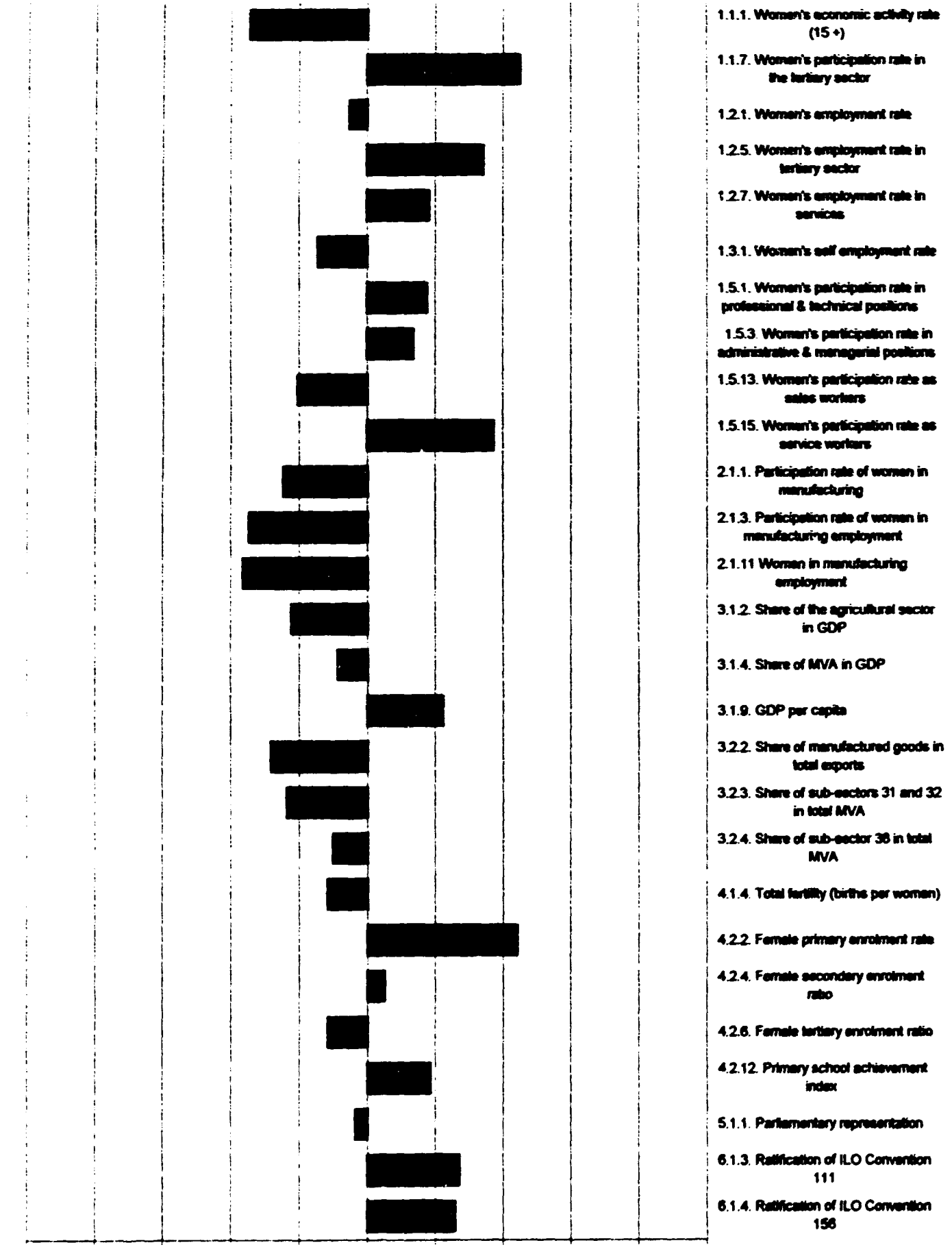
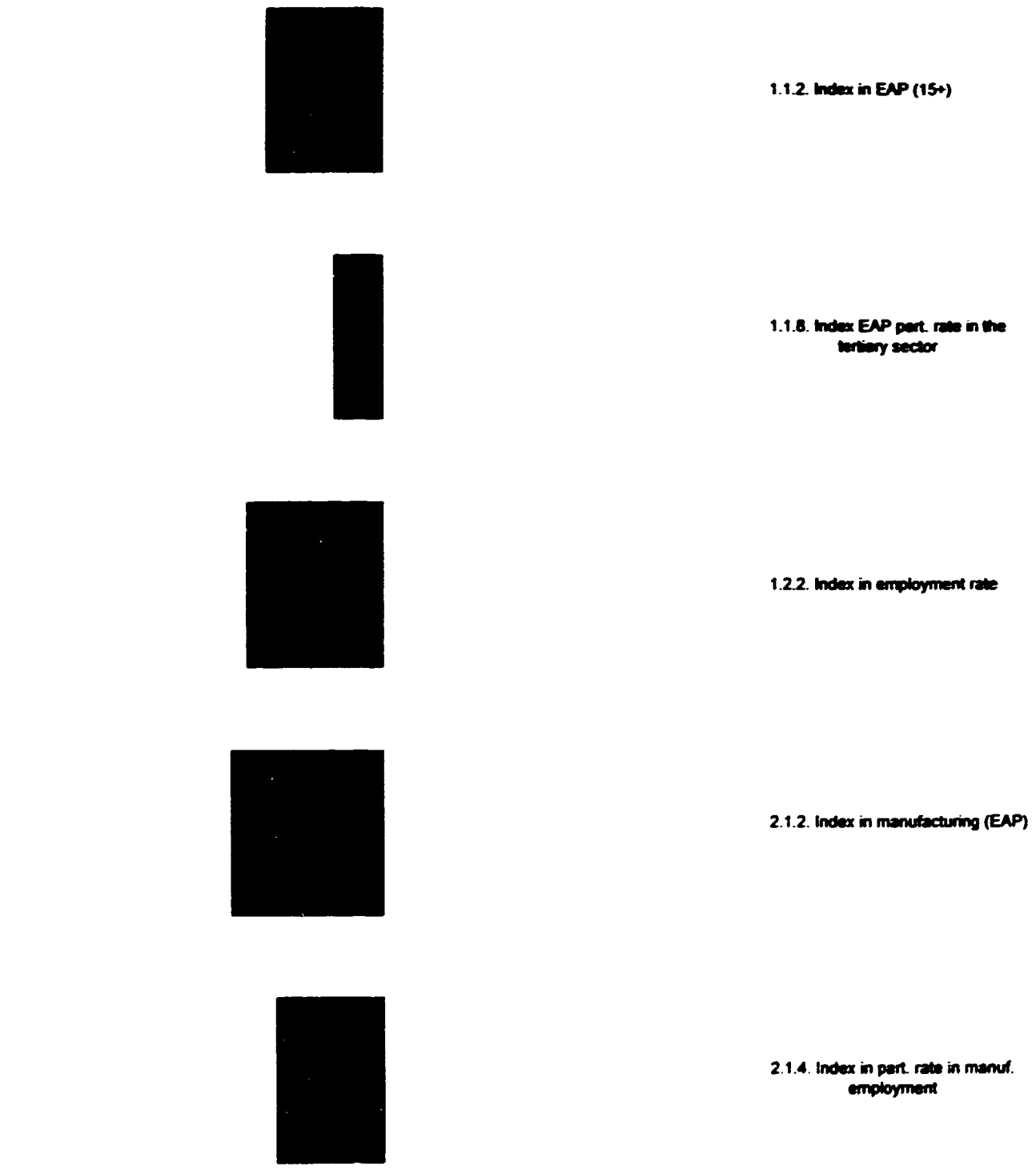


Figure 3.2

MALE/FEMALE DISPARITIES
Cluster 1: Chile, Panama, Venezuela, Argentina



CLUSTER 2: Colombia, Costa Rica, Ecuador, Paraguay, Peru, Uruguay

This cluster comprises three middle income Andean countries, a Central American country with the highest social development in its sub-region and two small countries of the austral region of South America. In spite of the common features of a strong agricultural base and a relatively consolidated industrial sector, in other aspects the cluster is heterogeneous. The average GDP per capita for the cluster is US$1,921, but this indicator ranges from $1,181 for Ecuador to $3,644 for Uruguay.

The primary and manufacturing sectors have a larger share in GDP than is usual in the region. MVA contributes 18% of GDP, and as could be expected in agriculture oriented economies, the share of MVA constituted by food, textile and apparel is relatively high; but the cluster lags behind the regional average in the relative size of its metalworking sub-sectors. Manufactures make up 22% of total exports for the cluster, although this indicator varies from 33% for Colombia to 2% for Ecuador.

Given the small to medium size of their domestic markets, economic integration is important for the countries of this cluster. Colombia, Ecuador and Peru belong to the Andean Group, although the latter has temporarily limited its participation.

The three countries are ATPA beneficiaries, and Colombia will be part of the free trade zone of the Group of 3, together with Mexico and Venezuela. As the smallest countries of MERCOSUR, Paraguay and Uruguay can expect very substantial changes in their foreign trade once that common market comes into operation. Costa Rica, in turn, is the most industrially advanced country of the Central American Common Market and is a beneficiary of the CBI. Growth of trade will promote both industrial and agricultural expansion in these countries. EPZs exist in Colombia and Costa Rica, and although they are not large, they export textiles, apparel, footwear, metal products and electronic goods. About 40% of employment in EPZs is female.

On average, social and demographic indicators of the cluster are close to regional averages. The most advanced countries in this respect, as measured by fertility rates and poverty indices, are Uruguay and Costa Rica. Female primary enrollment and achievement rates are high for the cluster, and secondary enrollment is slightly lower than the regional mean.

Women's participation in legislative seats is 6%, although Costa Rica achieves twice that figure. In most countries, offices for women's affairs exist. Peru and Colombia have specific legislation on domestic workers. Only some countries have ratified the ILO conventions for the protection of women workers, and enforcement problems are present.

Figure 3.3

CLUSTER CHARACTERISTICS

Cluster 2: Colombia, Paraguay, Ecuador, Peru, Costa Rica, Uruguay

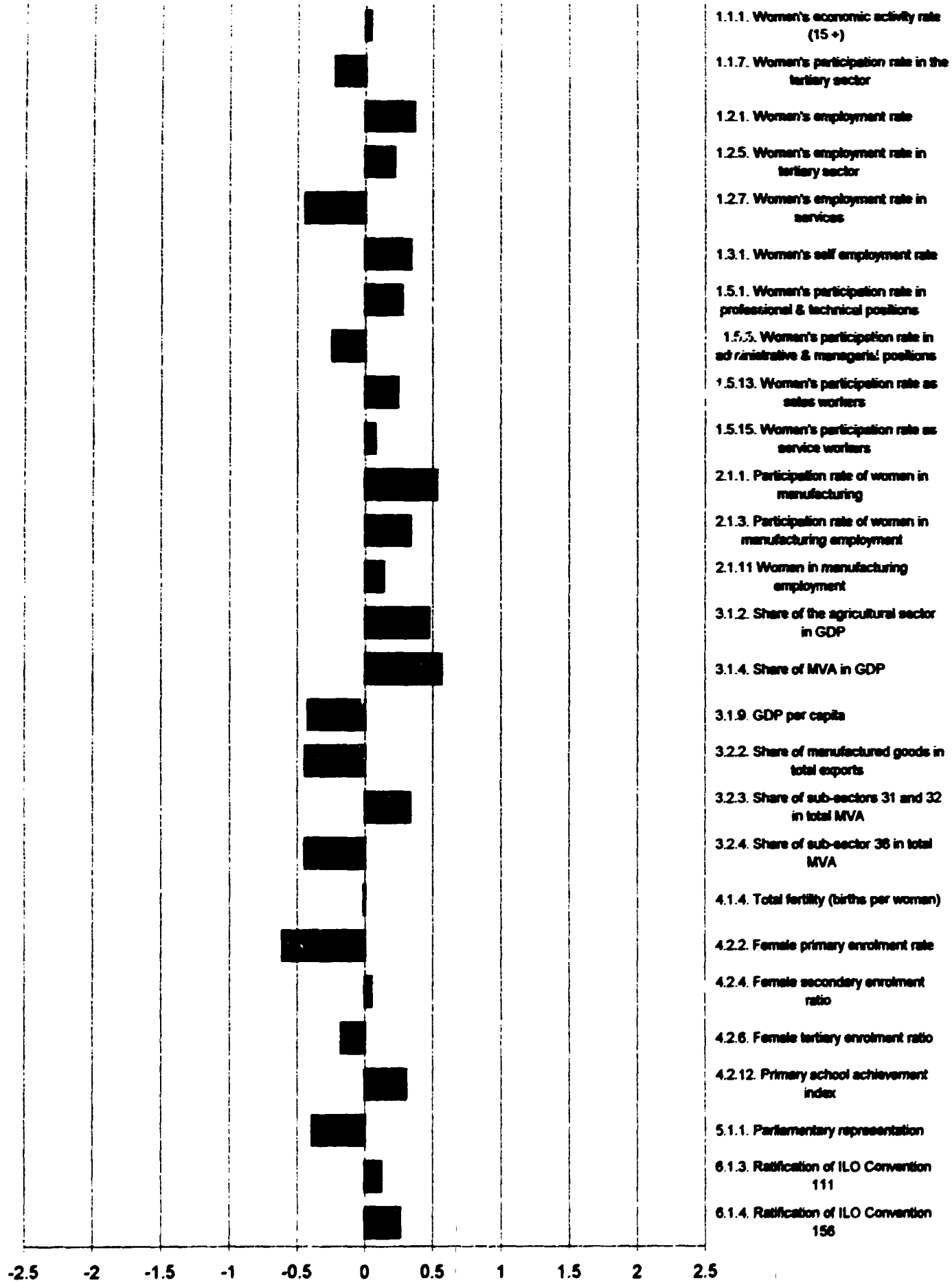
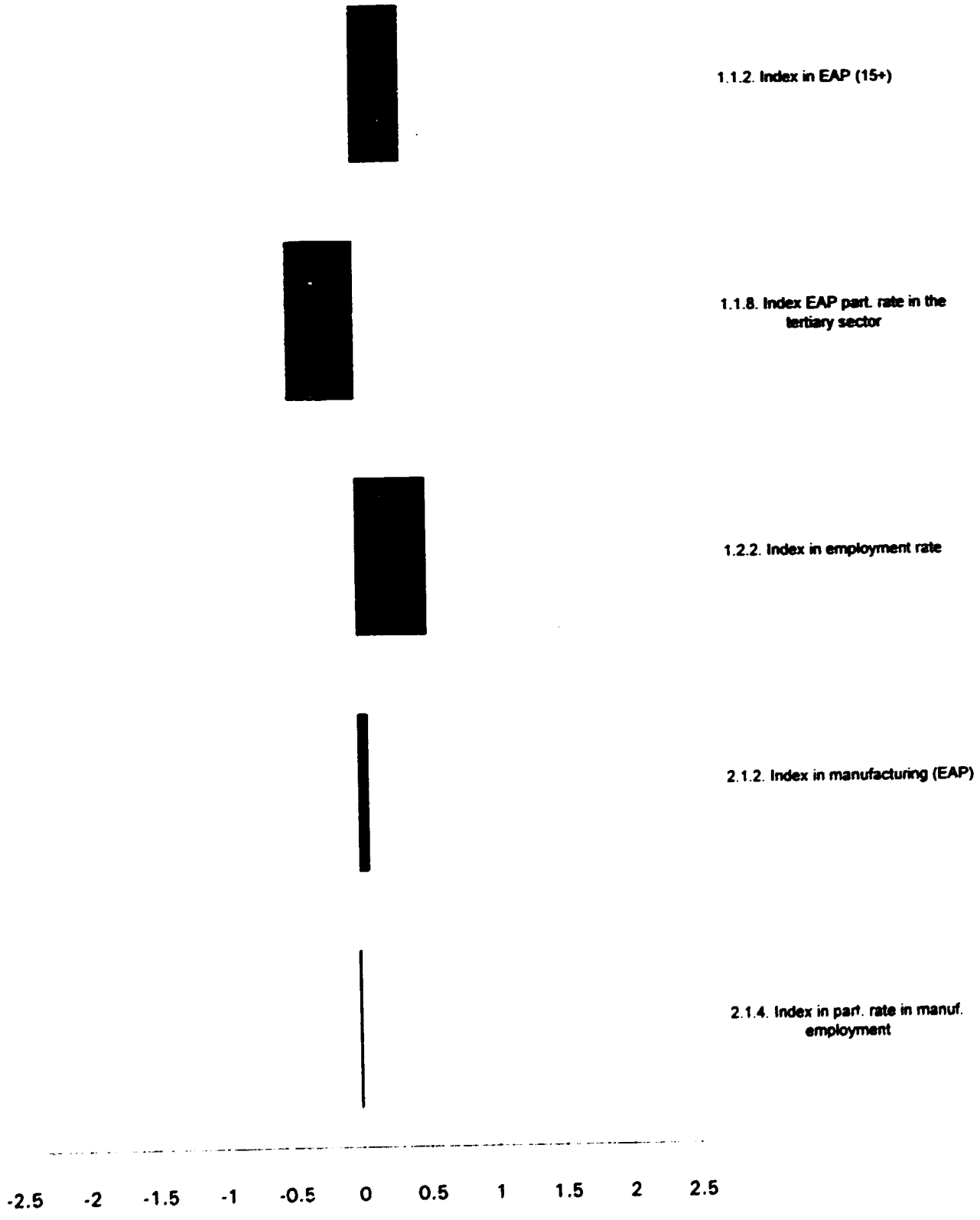


Figure 3.4

MALE/FEMALE DISPARITIES

Cluster 2: Colombia, Paraguay, Ecuador, Peru, Costa Rica, Uruguay



Women's economic activity rate is close the regional average, as is the employment rate of women in the tertiary and services sectors and the structure of female employment by occupational category. However, women have a higher participation rate in manufacturing--19%--than the regional mean. Women tend to have the largest participation in the textile and apparel sub-sector, but substantial numbers of women workers are found in food, paper, chemical and wood product sub-sectors in several countries in the cluster (Figures 3.11 and 3.12).

M/F disparities favour women in the indices of economic participation and employment rate. The index is more favourable to women in manufacturing, but favours men in the case of the tertiary sector. The profiles of this cluster are found in figures 3.3 and 3.4.

CLUSTER 3: El Salvador, Guatemala, Honduras.

This is a relatively homogeneous group of small Central American countries whose economies are still based on agriculture, although their industry is growing. Cluster 3 has the lowest GDP per capita in the region ($913), as well as being the least urbanized in LAC. Participation of agriculture in GDP, at 18%, is the highest in the region. Manufacturing industry's share, 16%, is the lower than the average clusters. However, the participation of manufactures in Cluster 3's exports--27%--is close to the regional average and higher than that observed in Clusters 1 and 2. The structure of Cluster 3's industrial production by sub-sectors is similar to that of cluster 2: 48% is made up of food, textiles and apparel, and only 7% comes from the metalworking sub-sector.

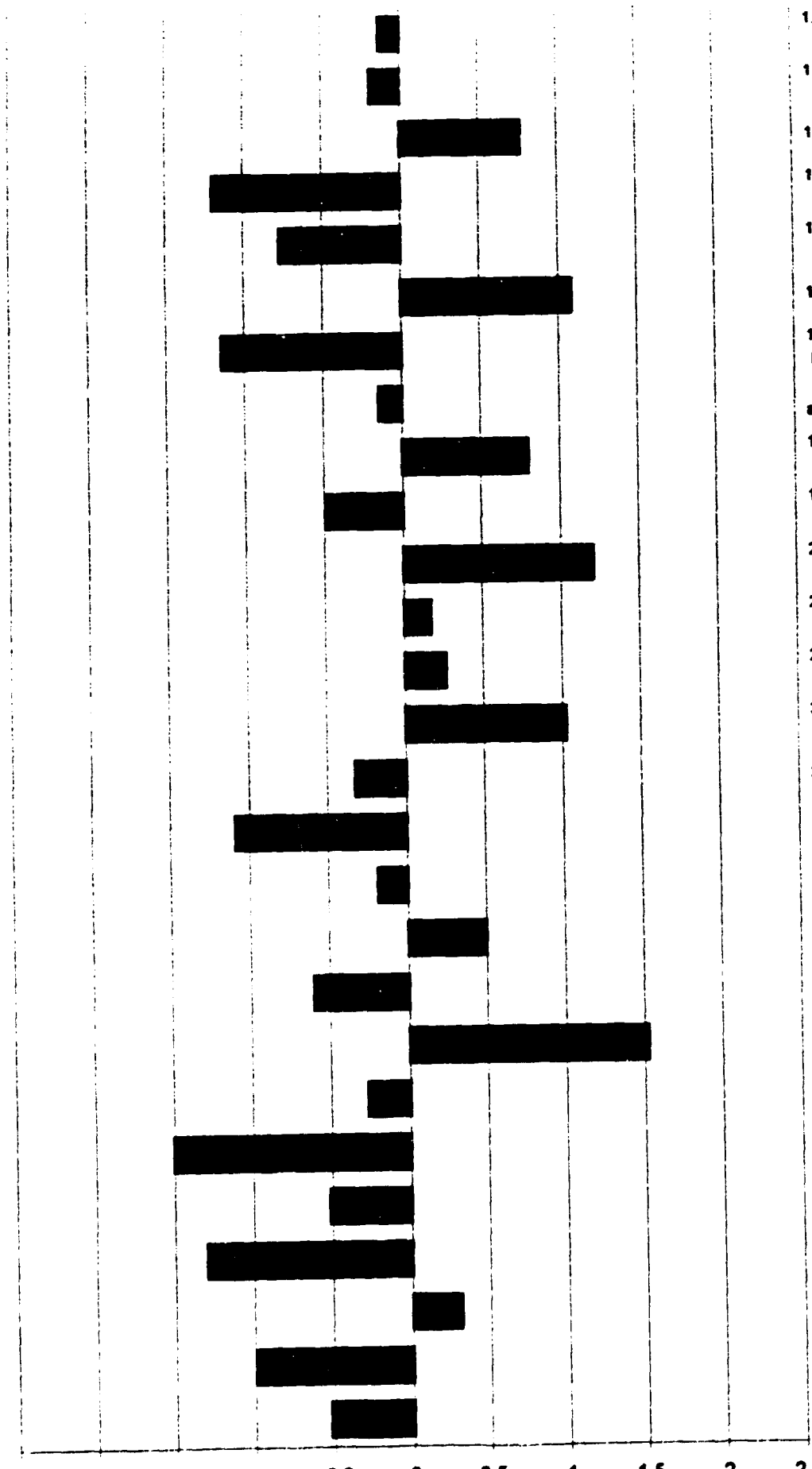
Social and demographic conditions are precarious; poverty indices are high in Guatemala and Honduras, and the number of children per woman for the cluster reaches 4.6, the highest of all clusters. The female primary enrollment rate is 109%, but the primary school achievement rate is the lowest in the region, as is the female secondary enrollment rate.

Women's representation in legislatures is close to the regional average, and Honduras has a ministry for women's affairs. In other countries, women's issues are the responsibility of offices or departments of ministries. Cluster 3 countries have ratified the CEDAW, but have abstained from doing so in the case of the ILO Conventions. This may indicate insufficient sensitization to women's issues.

Women's economic activity rate in Cluster 3 countries is close to the regional mean and employment rates are well above it. However, in terms of occupational categories, the situation of women in the labour market would seem to be disadvantageous. Women's self-employment rate and their rate of participation as sales workers are the highest in the region, and their participation rate in professional and technical positions is the lowest. Another singularity of Cluster 3 is that it has the highest women's participation rate in manufacturing. There is a degree of diversification in women's employment in industry in some countries (see figures 3.11 and 3.12).

Figure 3.5

CLUSTER CHARACTERISTICS
Cluster 3: El Salvador, Honduras, Guatemala



1.1.1. Women's economic activity rate (15 +)

1.1.7. Women's participation rate in the tertiary sector

1.2.1. Women's employment rate

1.2.5. Women's employment rate in tertiary sector

1.2.7. Women's employment rate in services

1.3.1. Women's self employment rate

1.5.1. Women's participation rate in professional & technical positions

1.5.3. Women's participation rate in administrative & managerial positions

1.5.13. Women's participation rate as sales workers

1.5.15. Women's participation rate as service workers

2.1.1. Participation rate of women in manufacturing

2.1.3. Participation rate of women in manufacturing employment

2.1.11 Women in manufacturing employment

3.1.2. Share of the agricultural sector in GDP

3.1.4. Share of MVA in GDP

3.1.9. GDP per capita

3.2.2. Share of manufactured goods in total exports

3.2.3. Share of sub-sectors 31 and 32 in total MVA

3.2.4. Share of sub-sector 38 in total MVA

4.1.4. Total fertility (births per woman)

4.2.2. Female primary enrolment rate

4.2.4. Female secondary enrolment ratio

4.2.6. Female tertiary enrolment ratio

4.2.12. Primary school achievement index

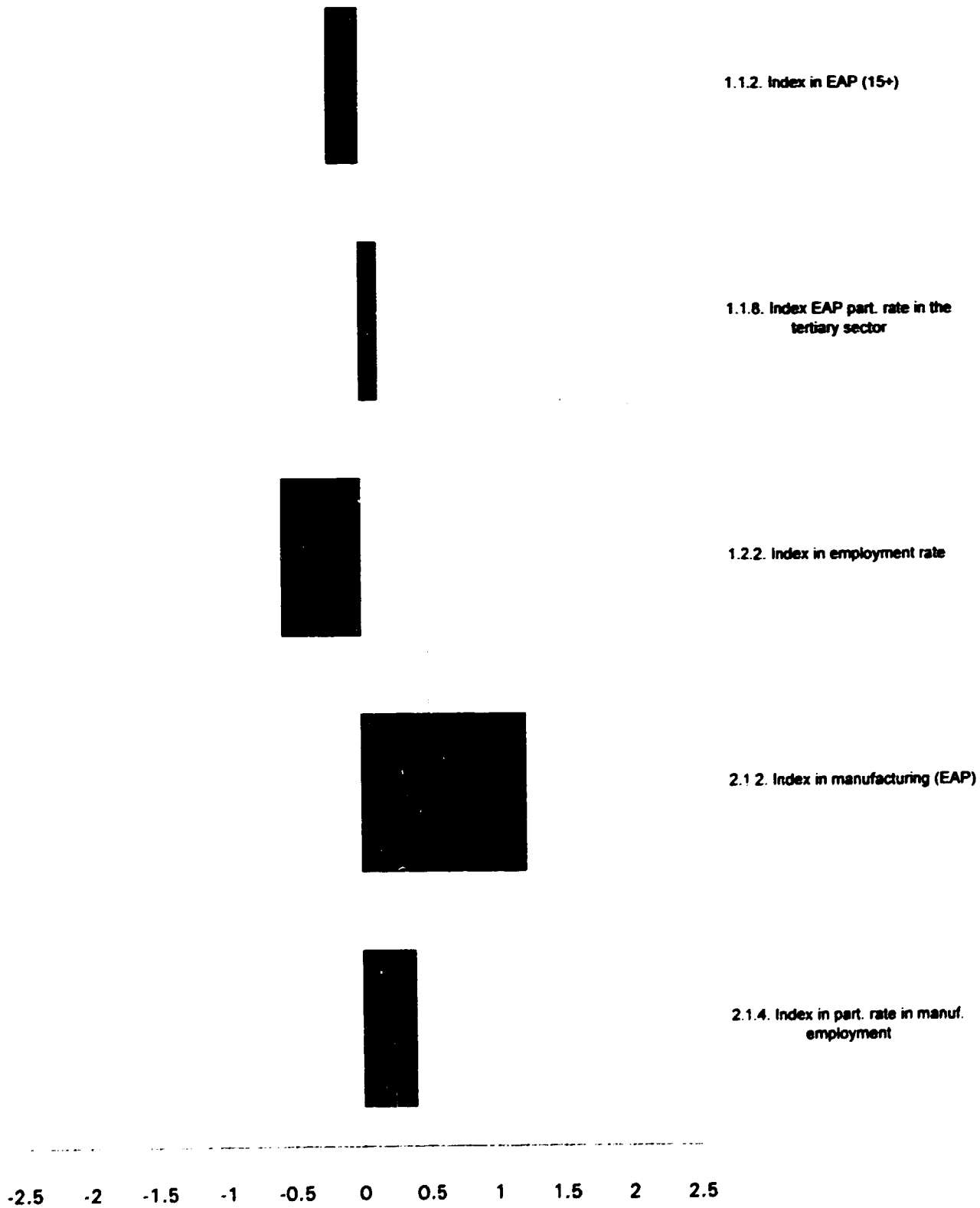
5.1.1. Parliamentary representation

6.1.3. Ratification of ILO Convention 111

6.1.4. Ratification of ILO Convention 156

Figure 3.6

MALE/FEMALE DISPARITIES
Cluster 3: El Salvador, Honduras, Guatemala



The M/F disparity indexes are favourable to women in the case of participation and employment in manufacturing, even though women lag behind men in terms of participation in total employment.

CLUSTER 4: Brazil, Mexico, Trinidad and Tobago

This cluster is made up of the two largest economies in the region, both of which are NIEs and which are the source of the vast majority of LAC's high technology exports, and of a major oil exporter. The GDP per capita of this group is $3,617, the second highest among the clusters.

Although the share of MVA in GDP (18%) is equivalent to the mean for the region, the structure of manufacturing production by sub-sectors is notably different from the LAC average. Almost 30% of MVA is generated by the metalworking sector (12% for the region as a whole). In Cluster 4 production of food, textiles and apparel is relatively less important and benefits the maturity of its industrial sectors. Almost half of Cluster 4's exports are manufactures.

Both Mexico and Brazil have adopted aggressive strategies to penetrate external markets. Mexico, through NAFTA, is increasing its access to the U.S. and Canadian markets, and has succeeded in attracting foreign industrial investment both from its North American partners and from third countries that see Mexico as a gateway to its northern neighbours. Brazil has led the way in the creation of MERCOSUR. EPZs are very important in Mexico, where practically the whole frontier with the U.S. enjoys free trade status and has enjoyed vigorous, export-led growth. There are 400,000 industrial jobs in these, "maquila", industries, equivalent to 11% of manufacturing employment. In Brazil, the scale of employment in EPZs is significant (117,000 jobs), although less so in relative terms (2% of manufacturing employment). The most important EPZ in Brazil is in Manaos and specializes in electronics.

The social and demographic environment in Cluster 4 is not particularly homogeneous. Fertility for the Cluster, at 2.9 children per woman, is below the regional average, but Trinidad and Tobago and Brazil are below and Mexico is above this level. Primary enrollment exceeds 100% of the corresponding rate. Mexico has a high share of households headed by women.

Women's participation in legislation is slightly above the regional average. All countries have women's affairs offices, and all have ratified CEDAW, but ILO Convention 111 has been ratified only by Mexico. Brazil has laws that protect domestic workers. Convention 156 has not been ratified.

Figure 3.7

CLUSTER CHARACTERISTICS
Cluster 4: Brazil, Mexico, Trinidad and Tobago

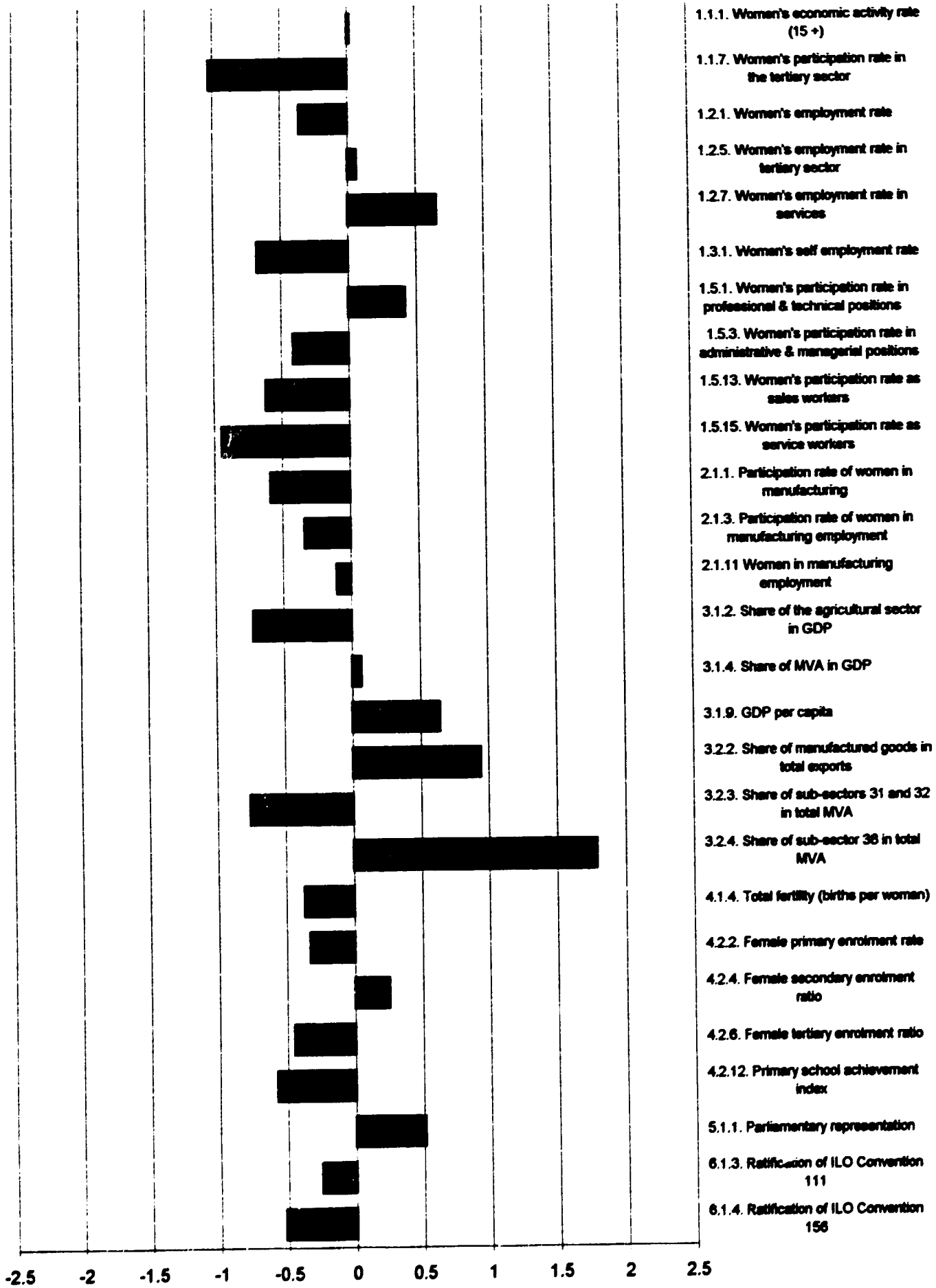
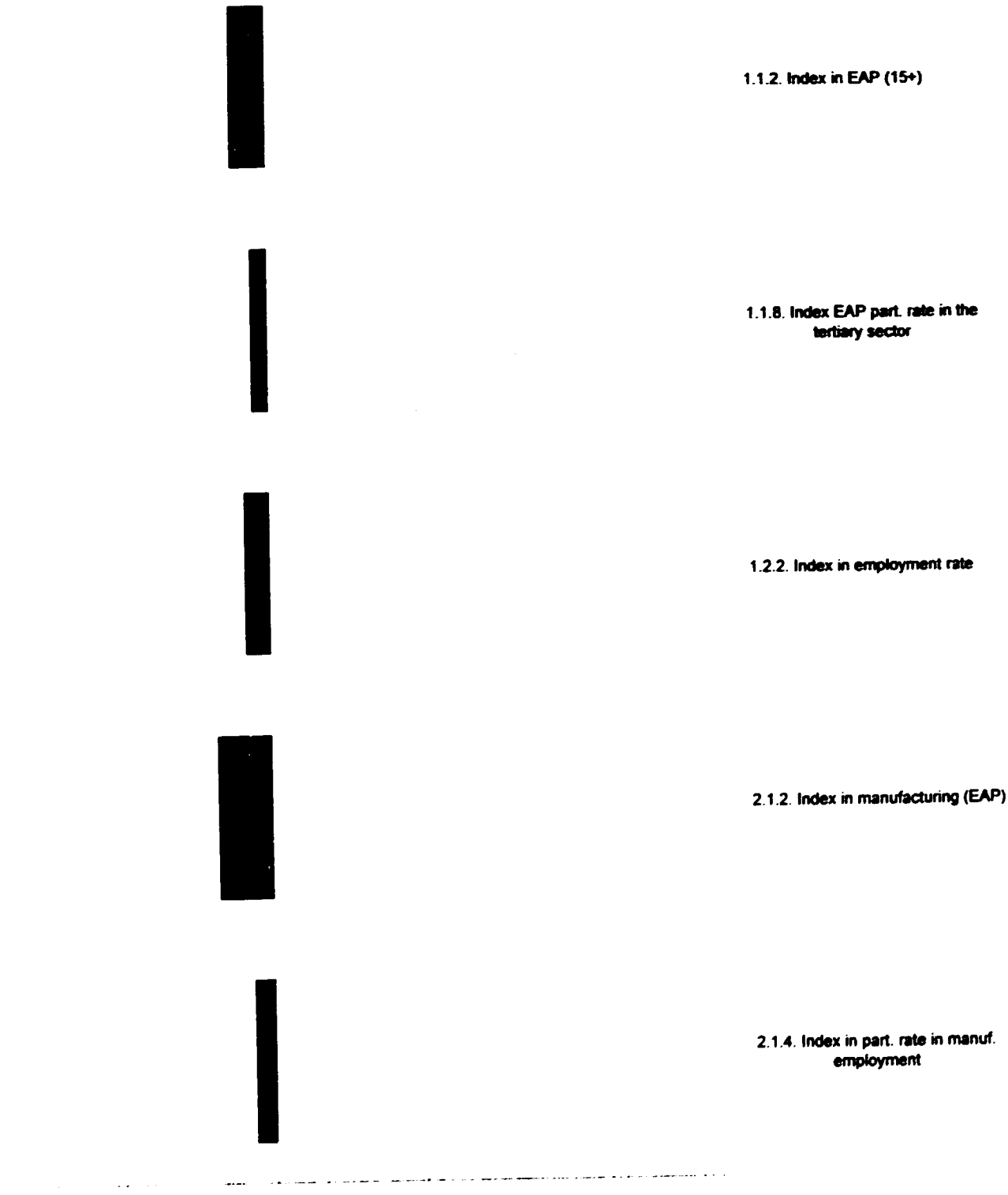


Figure 3.8

MALE/FEMALE DISPARITIES
Cluster 4: Brazil, Mexico, Trinidad and Tobago



Women's economic activity rates are similar to the regional average. The female employment rate in services is higher, and in manufacturing lower than the LAC mean. Women in Cluster 4 show a low rate in self-employment but high in services; they have greater access to professional and technical positions. Approximately 50% of workers in the textile and apparel sectors are women, and their share of employment in the chemical and paper and paper products sub-sectors is close to 30%. However, women workers do not exceed 20% of the total in the metalworking sector (figures 3.11 and 3.12). EPZs are a major source of jobs for Mexican women: a third of female industrial workers are employed by on firms in these zones.

M/F disparities are adverse to women in terms of economic activity rate, in employment, and in the tertiary and manufacturing sectors. The profiles of this cluster are shown in figures 3.7 and 3.8.

CLUSTER 5: Barbados, Jamaica

Both are small Caribbean island nations. As in the case of most of that sub-region, the economies are very service-oriented, and that, together with fact that the political, institutional and educational systems reflect the British tradition, make this cluster very different from the regional average.

Cluster 5 is the least industrialized and with cluster 4 has the smallest participation of agriculture in GDP among the groups of countries under study. The structure of the manufacturing sector, as measured by the share of production of the food, textiles and apparel, and the metalworking sub-sectors is close to the regional average; however, the cluster's industry is highly export-oriented, as is indicated by the fact that 62% of the islands' external sales are of manufactured goods. This associated with the existence of EPZs specialized in apparel and foodstuffs. Between 1978 and 1989, female employment in Jamaica grew from 1,000 to 15,000 (Robbins, 1990) In addition, EPZs have come to attract data processing facilities.

Barbados and Jamaica differ widely in GDP per capita ($6,420 and $1,287, respectively), and this has consequences in terms of the demographic and social environment. Barbados has one of the lowest fertility rates in LAC, 1.8 children per woman, while Jamaica is higher. Jamaica also has a relatively high poverty index and a large share of households headed by women. However both countries have good indicators of coverage of education from women at all three levels.

Jamaican women have 12% of seats in the nation's parliament. Only ILO Convention 111 has been ratified by countries in this cluster.

Figure 3.9

CLUSTER CHARACTERISTICS
Cluster 5: Barbados, Jamaica

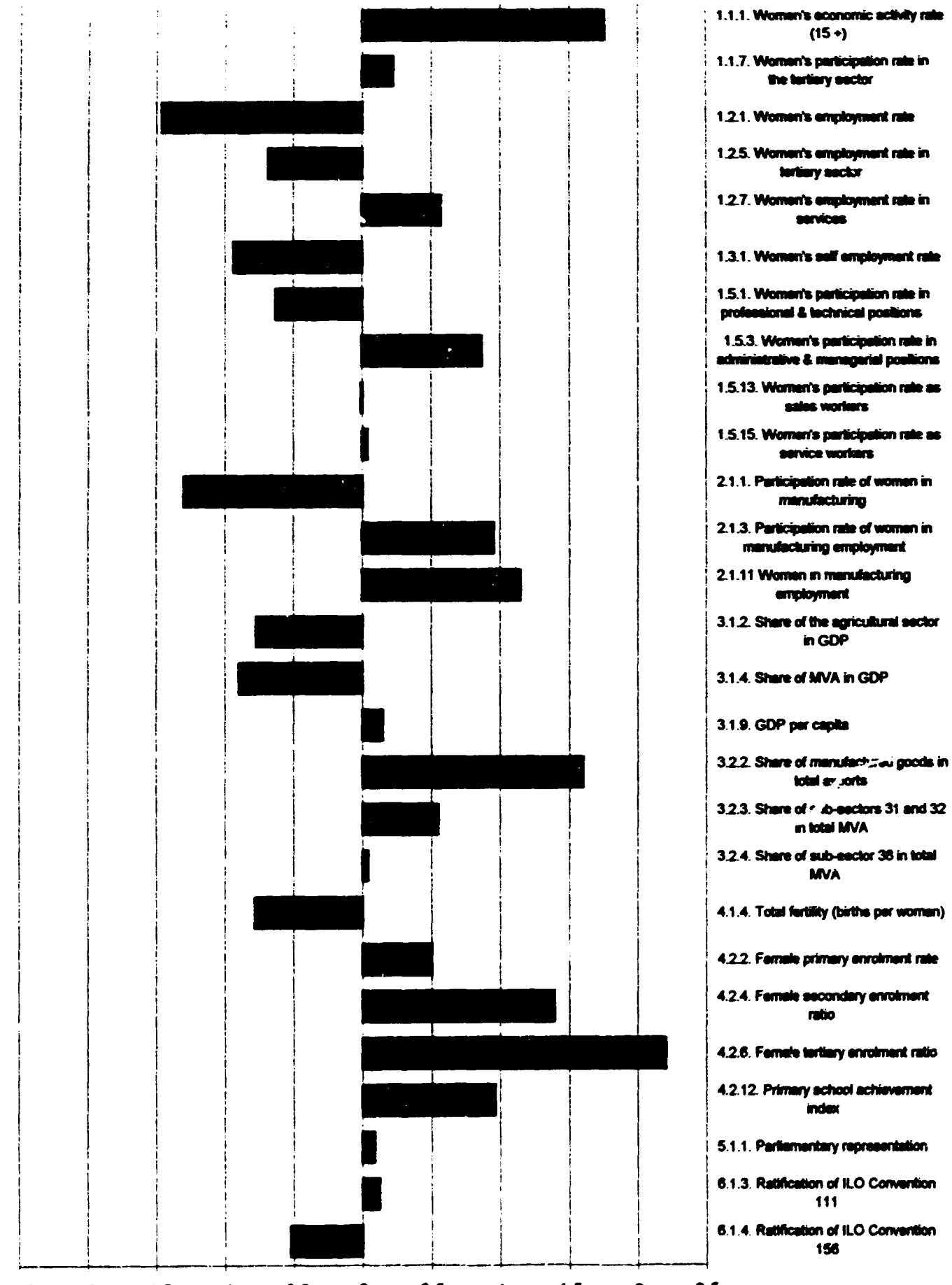


Figure 3.10

MALE/FEMALE DISPARITIES
Cluster 5: Barbados, Jamaica

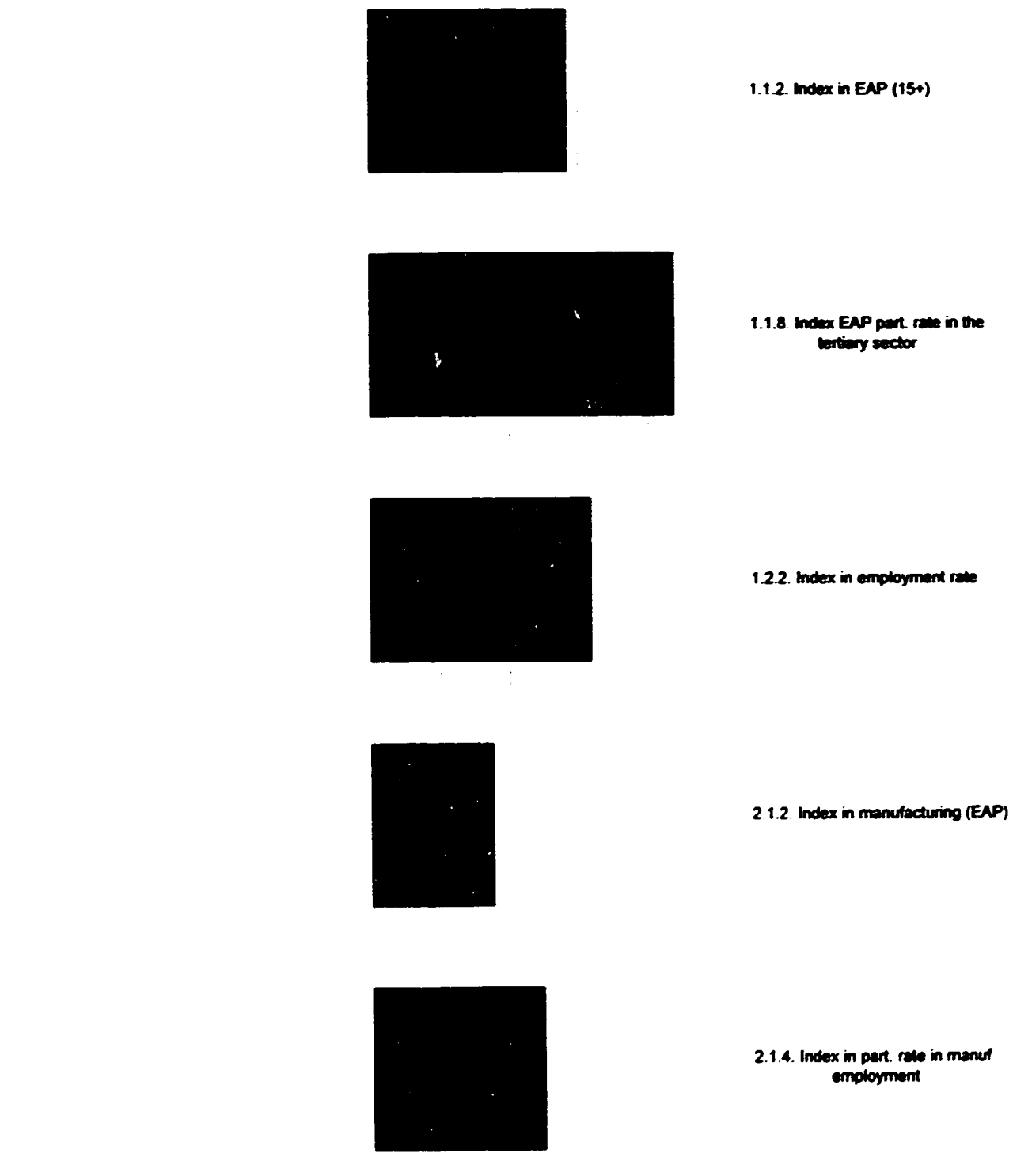
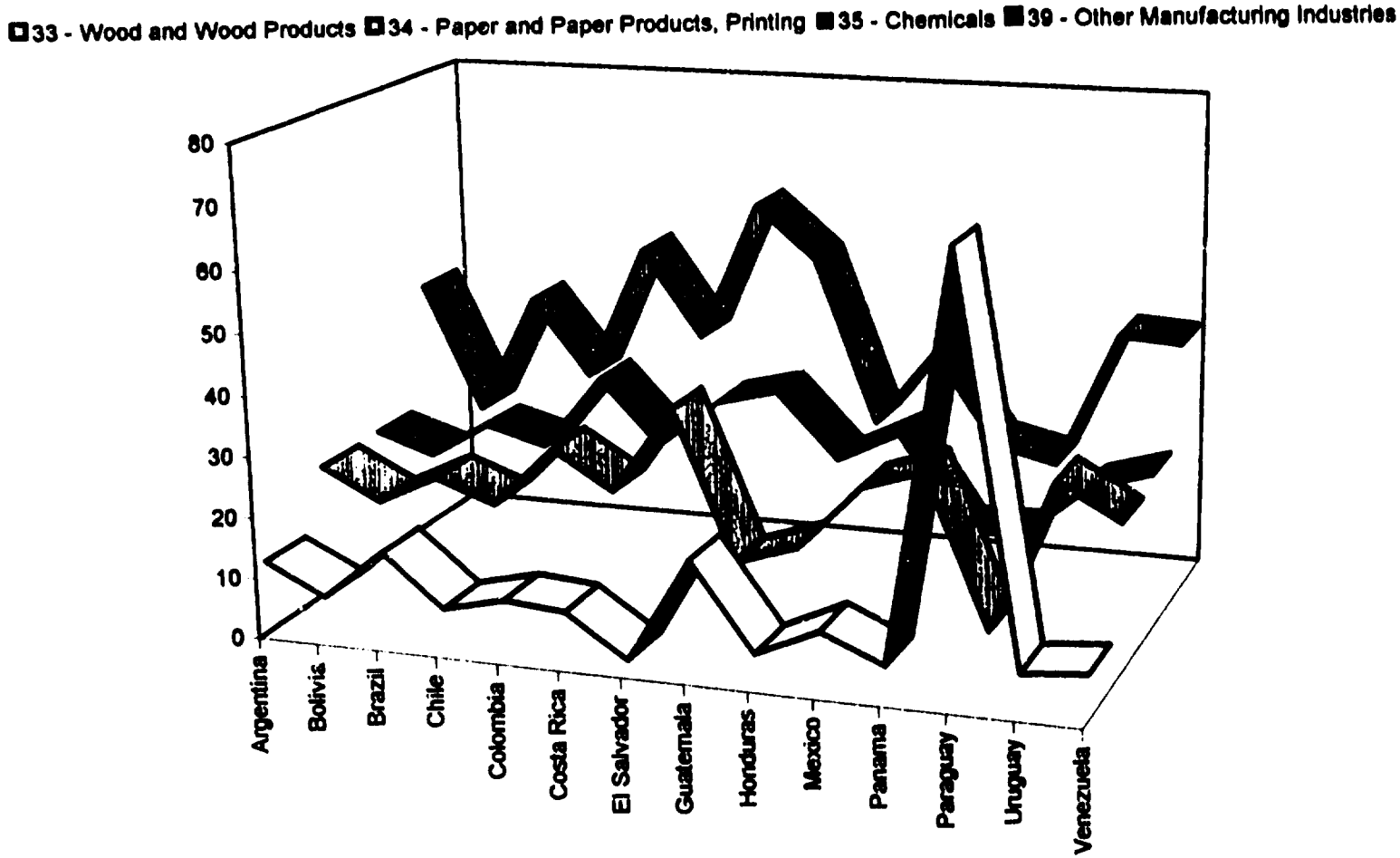


Figure 3.11

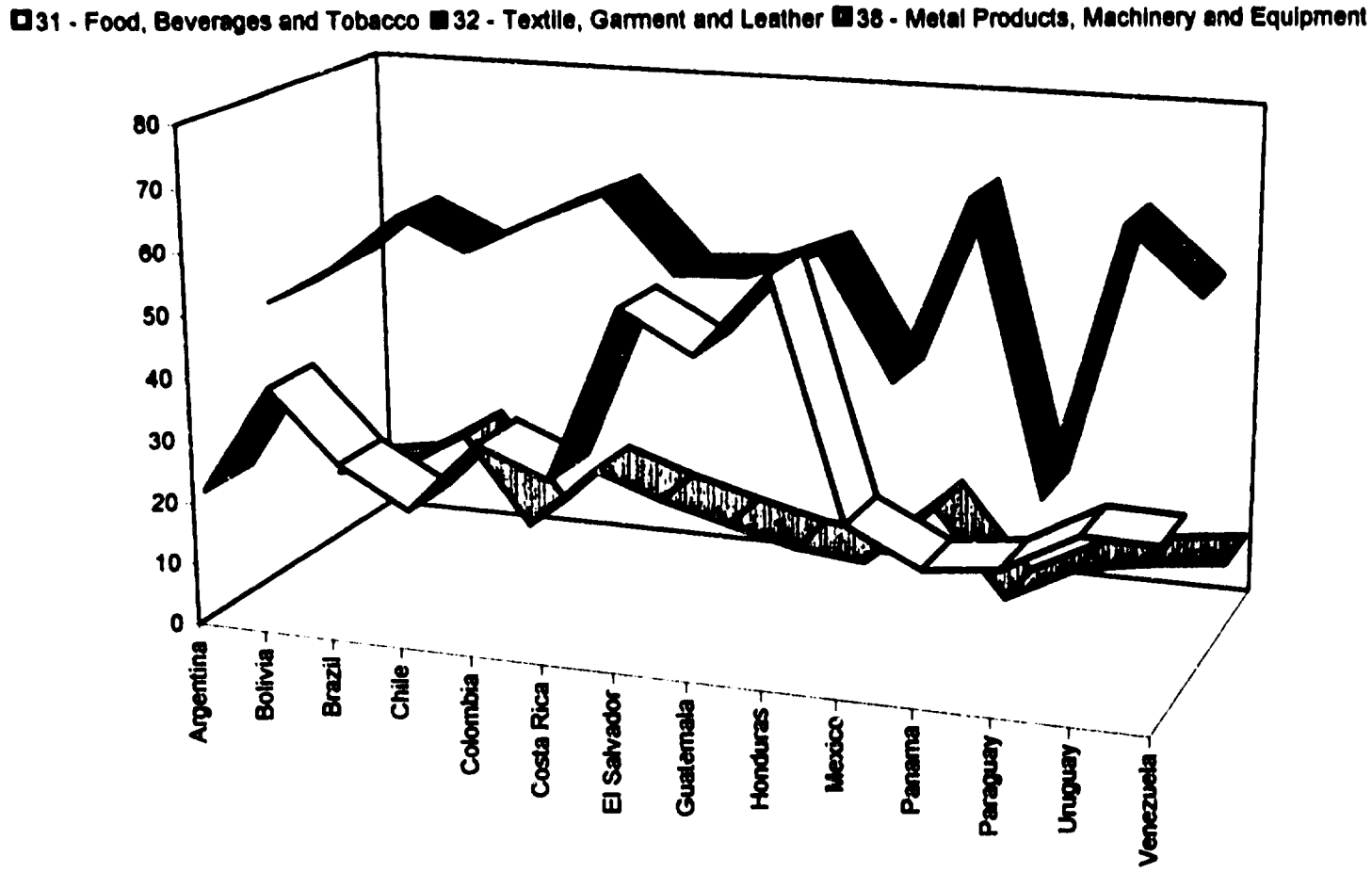
Participation of Women in the Manufacturing Sector
Selected Industrial Sub-sectors



Source: Economic Commission for Latin America and Caribe

Figure 3.11

Participation of Women in Manufacturing Sector
Selected Industrial Sub-sectors



Source: Economic Commission for Latin America and Caribe

Women's access to the labour market and to the manufacturing sector is much superior to the average of the LAC region. Women's economic activity rate is 61%, and 42% of women workers are employed in industry. In terms of occupational category, the results are mixed: women have a higher share of managerial and administrative, but a lower share of professional and technical positions; and the proportion of women that are self-employed is half of the regional mean. Service workers is one of the highest of all groups.

Unemployment rates for women (24%) are far higher than for LAC as a whole (11%).

The existence of EPZs with a strong demand for female labour, the high educational level of women and the fact that the islands are English-speaking has created possibilities for women workers not only in manufacturing, but also in data processing and similar services.

In terms of M/F disparities. The situation of Cluster 5 is the most favorable to women of any of the country groups (figures 3.9 and 3.10).

3.4 SOME COUNTRIES NOT INCLUDED IN THE ANALYSIS

Cuba

During the last decades, Cuba's economic and social development has emphasized the welfare of the most vulnerable groups. Achievements in education, health, social assistance and satisfaction of basic needs differentiate Cuba from other developing countries. Infant and maternal mortality is among the lowest in the region, and life expectancy for the period 1995-2000 is estimated at 76 years. However, Cuba's economic difficulties have caused a decline in consumption.

Women's economic activity rate is equivalent to the LAC average (40%). Women workers are concentrated in the tertiary and services sectors: two thirds of professional and technical workers are women. The share of administrative and managerial position held by women is also above the LAC mean. Women's participation rate in manufacturing, 17%, is similar to that of the region as a whole. In 1992, 87% of administrative jobs, 61% of technical and service jobs and 26% of managerial jobs were held by women. The number of self-employed women workers in trades such as hairdressing, apparel at handcrafts has grown four-fold since 1982. Cuban industrial production is mainly oriented to the internal market, and only 6% of Cuba's exports are manufactures.

The fertility rate in Cuba (3.5 children per women) is among the lowest in the region. Enrollment and graduation rates are similar for men and women at all levels of education, but in many professions women are a majority. The pre-school system is of great help for working women.

Cuba has the highest rate of women's participation in the legislature (23%). Women also participate in the executive and the judiciary. Over 90% of women workers are unionized.

Haiti

Haiti is in a critical economic and political situation. GDP per capita has fallen since 1988, and is currently the lowest in the region. The embargo imposed by the UN and the OAS has affected women and children most. Women, of whom 30% are heads of households, have lost their jobs because of the closing of factories--between 1991 and 1992 job losses reached 40,000. The maternal mortality rate of 345 per thousand and the infant mortality rate of 94 per thousand are among the highest in the developing world, and may rise because of the crisis. Half of the school age population is undernourished, as are 50% of children under 5, and this situation is expected to deteriorate further.

Because of the pressures derived from political conflicts and economic crisis, violence against women has increased. Scarcity and poverty have made women's situation more difficult, and so has the fact that the majority of emigrants are men.

Women's economic activity rate is 49%, well above the LAC average. This may be due to the proportion of households headed by women. However, women's participation is hampered by a fertility rate of 5 children per women.

Female unemployment is 21% in Haiti, as compared to a LAC average of 11% Haitian women have lower rate of employment in tertiary (40%), service (20%) and manufacturing sectors (6%) than elsewhere in the region; this is due to a high participation rate in agriculture (45%). The manufacturing sector depends on foreign investment, and 84% of its production is exported. It has been particularly vulnerable to political instability.

Haiti has some of the highest illiteracy rates and lowest educational enrollment rates at all levels, and significant gender disparities exist. In 1985, only 35% of women and 40% of men were literate.

Life expectancy at birth is 55 years.

The Smaller Caribbean Islands

The smaller Caribbean island countries have, in many aspects, similarities with the demographic/social environment found in Cluster 5. However due to the very small dimension of their domestic markets, as well restrictions of factor endowment, industrial production in many of them is virtually non-existent.

Tourism is the main economic activity and has grown rapidly in recent years. The activity faces problems such as the high import component of inputs and weak links with local productive sectors.

The lack of statistical information and of studies that permit the identification of constraints and formulation of proposals adequate to the islands' conditions is a major difficulty in policy design.

CHAPTER IV

GLOBAL TRENDS IN INDUSTRIAL DEVELOPMENT TO THE YEAR 2000

In Chapter I, the global tendencies of economic development of the LAC region were set out, in order to provide a context for the analysis of women's participation in industry. Chapter II defined the characteristics of the model that determines women's participation in economic activity and in manufacturing. Chapter III identified five patterns of women's participation in the region's industrial sector.

Using these as a reference, the present chapter will discuss major trends that will affect the possibilities offered by the labour market to women in the medium term. This will permit a more precise design of strategies to improve women's economic participation, especially in the manufacturing and service sectors.

4.1 URBANIZATION AND DEMOGRAPHIC CHANGES

During the last fifty years, an accelerated process of urbanization took place in the region. Today almost two-thirds of its population lives in cities. At the same time, the region underwent a demographic transition, which had several independent effects. In the period of most rapid population growth, the LAC countries were forced to make substantial investments in social and public services and urban infrastructure. When the cohorts born in the periods of highest population growth reached working age, the expansion of the urban EAP became explosive.

Urbanization brought with it many changes in life styles. It led to a generalized (but not universal) access to education and health care. This in turn influenced demographic trends. As women become more educated, have more access to health care, have higher rates of labour participation and income, fertility and population growth fall. Another consequence is a better trained work force, which is more adequate for high-technology, high-productivity occupations.

4.2 TECHNOLOGICAL AND BUSINESS ORGANIZATION CHANGES

New approaches to production, driven by a more demanding, specialized and changing market, have led to the introduction of flexible manufacturing and the just-in-time concept, both based on the use of information processing. These technical innovations have transformed business organization and supplier-purchaser relations. They also have implied decentralized production and a more frequent recourse to subcontracting.

On the production floor, the concept of total quality is generalized, as is the creation of multi-skilled teams. These computer-intensive developments make the price of labour less important and require higher levels of quality in the work force. Flexibility and adaptability to new technical and administrative systems of production became crucial.

The introduction of technologies such as information networks, flexible manufacturing systems and subcontracting can be the source of new opportunities for the creation and modification of jobs to suit the needs of women that cannot work full time because of their domestic responsibilities.

In order to prepare women for these changes, disparities in education must be reduced and technical training opportunities for them increased. A minimum of secondary schooling is indispensable for the purpose. In equal conditions, women have shown themselves more adaptive to new forms of organization of production than men.

4.3 RELOCATION OF MANUFACTURING PRODUCTION

If the development and economic policy models adopted by LAC countries lead to higher and more stable growth, perspectives for demand, production, investment and job creation in their manufacturing sectors will improve. However, the final result will depend to a great extent on the trade-creating or trade-diverting effects of the economic blocks that are being formed, on the economic trends of the OECD nations, in particular the U.S., and the region's capacity to attract foreign investment.

Not all sectors and economic activities will fare alike under the new conditions. Those in which LAC countries have comparative advantages will benefit; those which lack them will lose. In the latter, the existence of discrimination against women could lead to a more than proportional loss of female jobs and requires special compensatory measures.

Comparative advantages and international competitiveness are due in part to factor endowment (i.e. abundant labour or natural resources); but they can also be created, by means of technology, better management and, of course, the quantity and quality of investment. If particular characteristics of female labour force are taken into account, they may become a source of comparative advantages.

Structural changes in manufacturing production have imposed new patterns of investment and sourcing. However in some sectors, because of physical restrictions of the product or the process, automation cannot yet compete with cheap labour and the search for locations with this advantage goes on.

Other factors influence location, such as quota evasion, special access schemes like Lomé and CBI, in the case of the Caribbean, and in the future, NAFTA and MERCOSUR. However, the Uruguay Round of the GATT may eliminate some benefits of bilateral trade preferences.

Relocation also affects data processing. To guarantee her participation in this sector, women must improve and diversify their technical training.

A frequent means of reducing production costs is subcontracting with small productive units, including home workers. This type of work is unprotected by labour laws, is not registered, and is part of the informal sector. However, if producers' associations do not exist, it is difficult to improve the conditions of this invisible labour force.

4.4. PRIVATIZATION AND FOREIGN INVESTMENT

Privatization has become a usual instrument of economic policy in LAC countries, for a number of reasons: more orthodox macroeconomic policies that improve the business climate, the reform of foreign investment regimes and a narrower definition of the areas which require direct state intervention. In some cases, privatization has taken the form of the sale of productive assets, the proceeds of which are destined to the reduction of budget deficits. In others, private enterprise is allowed to compete in activities once reserved to state monopolies (such as telecommunications). By means of concessions and schemes such as BOT (build, operate and transfer), the state can delegate the provision of public services to the private sector. Normally, privatization policies seek gains in efficiency.

Privatization has been undertaken on a large scale in Mexico, Argentina and Chile. For example, in Mexico the number of state-owned enterprises was reduced from 1,555 in 1982 to less than 200 in 1992.

Privatization has several consequences for the quality and quantity of employment. It can lead to the elimination of jobs; a frequent reason for privatization of state enterprises is the existence of over-staffing. However, if privatization permits the attraction of fresh capital and new technologies, it can make viable enterprises that would not be competitive under public administration. If privatization eliminates bottlenecks in key services for the industrial sector (as occurred in Chile with the seaports), its positive indirect effects on competitiveness and new job creation can be substantial.

Similar considerations can be made in the case of the more permissive foreign investment policies of many LAC countries. During the seventies, among the criteria for the approval of foreign investment it was expected that it should not go to sectors and activities "adequately served" by local firms. The elimination of restrictions and other obstacles to foreign investment in agro-industry and light manufactures made possible the rapid expansion of production, exports and employment in Chile. In Mexico, the creation of schemes to facilitate foreign investment

in the "maquila" industries along the border with U.S. led to a substantial growth of industrial production and foreign sales.

However, privatization and foreign investment promotion policies often include changes in labour laws (including greater flexibility, less emphasis on anti-discrimination provisions and collective bargaining) that worsen the conditions of female employment.

4.5 TERTIARIZATION OF THE ECONOMY

As the manufacturing sector becomes more capital-intensive, the tertiary sector has grown rapidly. This trend, which first became evident in the OECD countries, can also be observed in the LAC region, where the tertiary sector has an average share of 56% in GDP, while manufacturing only reaches 18%. In OECD countries, the growth of the service economy can be explained by dynamic demand for consulting, accounting, maintenance and export promotion services which are provided by independent firms. In the case of the LAC region, a similar process has taken place, especially in the financial services sector, which has received significant foreign investment.

Women's participation rates in the tertiary sector in LAC countries are relatively high, although half of female workers are concentrated in community, personal and domestic services. In the financial sector, the growth of women's employment is faster than that of men (Braig, 1992). Of nine countries analyzed by ECLAC, in eight participation of women in finance, insurance and real estate grew between 1960 and 1980. This indicates that women have been able to take advantage of the expansion of the region's tertiary se or.

4.6 EXPORT PROCESSING ZONES

The expansion of EPZs in developing countries since 1970 is impressive. However, EPZs are relatively concentrated in few countries. In 1988, 94% of worldwide production and 97% of employment was in 14 countries. Three of these (Mexico, Brazil and the Dominican Republic) are in the LAC region. The employment generated by them is 91% of total regional employment in EPZs (ILO, UNCTC, 1986). Nine tenths of EPZ production in the region took place in Mexico and Brazil (UNIDO, 1993). EPZs have also concentrated foreign investment received by the region.

The performance of EPZs has not been uniform in the LAC countries; success seems to depend on local economic conditions. An effective transfer of technology and articulation with domestic industry require, besides an adequate EPZ regime, policy reforms in foreign trade and investment, as in Mexico in recent years. Before these reforms, the maquila industries in that country were only an "enclave programme" (UNIDO, 1993).

Women's employment in EPZs is important. The female participation rate in Mexico is 35% and ranges from 50% to 70% in other countries. The quality of women's jobs is low, and workers' rights are restricted. However, women are preferred, both in EPZs and outside of them, because of certain skills and abilities that are essential for the incorporation of new technologies and organizational models (fine motion, precision, responsibility and participant leadership). Although these traits fall under the usual gender stereotypes, the challenge consists of assuring that they are properly valued and used as a negotiating instrument to obtain equal remuneration and elimination of gender discrimination. The state must guarantee, in a competitive context, quality employment (reasonable wages, social security, child care, on-the-job training and promotion of women workers' associations) (Buvinic, Lycette, 1994).

4.7 THE INFORMAL SECTOR

In the past, the informal sector has been the last recourse of unskilled workers, and the only alternative for those who cannot get jobs in the modern sector. PREALC estimates that 30% of the urban EAP in the LAC region is in the informal sector, a proportion that has remained stable since 1970. Other methodologies suggest a participation of informal workers in the EAP of between 44% and 60% for the period 1970-1980 (Portes and Schauffer, 1993). Workers in the informal sector often must accept low incomes and inadequate conditions. Employment in the informal sector, according to PREALC (1991), grew at an annual rate of 6.7% between 1980 and 1987, while the LAC region's labour force was growing by 2.8% per annum. Simultaneously, the relative income of informal workers shrank: their mean earnings fell by 41%, compared to the average of 28% for the economy as a whole.

Gender discrimination has concentrated women in the informal sector. In the medium term, factors such as better education, the slower growth of the urban EAP and recovery of the LAC economies and manufacturing sectors will create more job alternatives in the modern sector. In the meantime, actions must be taken to improve the productivity of informal sector enterprises and their integration with the rest of the economy.

The informal sector is both competitive with and complementary to the modern sector. It is heterogenous and changes constantly, and has traits of both pre-capitalist and post-industrial economies.
There is a great disparity in earnings, and informal workers are sometimes better remunerated than those of the modern sector (Bryan, 1993, Roberts, 1993).

The needs of the informal sector, in terms of support programmes, are many and diverse. They include social protection, improvement of working conditions, technology, marketing and credit, among others. Assistance programmes must address the specific requirements of its principal components. Of these, the most relevant for the manufacturing sector are self-employed and home workers, entrepreneurs, employees of very small firms and the informal component of large and medium companies. Such programmes must reinforce cooperative bonds between informal enterprises (Portes and Schauffer, 1993). Technical assistance should give priority to

the units best placed to supply goods and services required by the modern industrial sector. (Roberts, 1993).

Some policy recommendations for actions in support of the informal sector are: a) seek broader markets, in particular by orienting informal enterprises' production to be needs of modern firms and the consumption of medium and high income households; b) establish mechanisms to grant credit and training to informal productive units; and c) eliminate barriers to access and growth.

CHAPTER V

STRATEGIES AND PRIORITIES FOR ACTION FOR INDIVIDUAL GROUPS OF COUNTRIES

This report seeks to identify appropriate strategies to lessen the disparities of female participation in the manufacturing sector within the region and in the systems that support this participation, as envisioned up to the year 2000. The methodology allowed the identification of five clusters of countries that correspond to five different patterns of female participation. The distinctive characteristics of each pattern present varied challenges and require the assessment of specific restrictions for each cluster.

Strategies and action proposals for each cluster are introduced in this chapter. Based on the results from previous chapters and the guidelines of UNIDO methodology, specific strategies were designed for each cluster/pattern of countries, and priority actions were identified to implement them. The proposals for action constitute in themselves work programmes for each cluster. The close relationship that exists within the various actions suggests their simultaneous progress, so that a greater impact may be produced.

The agents that could intervene in each action were identified on a preliminary basis. However, naming organizations does not imply the existence of any agreements; it only suggests that the nature of the current work of such organizations would make their participation appropriate.

The strategies and actions proposed in this chapter will hopefully serve governments as guidelines for devising programmes to enhance female participation in the manufacturing sector. A reasonable number of the proposed actions may also be relevant to other countries not included in the cluster analysis, such as Bolivia, Dominican Republic, Nicaragua, Haiti, Cuba and the smaller islands of the Caribbean.

These proposals may also serve as a framework for the formulation of action programmes for national and international agencies that are currently involved in enhancing the conditions of women's participation in manufacturing.

The last group of strategies refer to the LAC Region as a whole; they were inferred from the global vision of the region and refer to the components of the conceptual model (Box 1). The regional strategies complement and support the specific strategies that were formulated for each individual cluster. The actions refer to analyses, support studies and the data bank constructed in the course of this investigation.

5.1 CLUSTER 1: Chile, Panama, Venezuela, Argentina

MAIN CHALLENGES

1. Increase women's participation in economic activities.

   a. Increase participation of women who work in the poorest sectors of the labour force.
   b. Achieve greater female access to decision-making positions.

2. Diversify women's insertion in the labour force in the various sectors of economic activity, with emphasis in the high technology sub-sectors. Diversify their participation within the occupational categories.

3. Protect and enhance the working conditions of the labour force, and especially those of women.

4. Absorb the additional labour force that results from the urbanization process.

5. Assimilate female unemployment produced by privatization.

6. Diversify female participation by taking advantage of the expansion of the tertiary sector of the economy.

CONSTRAINTS

1. Prevailing educational model has little relevance with the human resource needs of the productive sector.

2. Work-related training without gender perspective.

3. Gender-biased occupational segmentation.

4. Incompatibility between international conventions and local legislation. Absence of safeguards and enforcement means.

5. Lack of adequate support systems to help women to have equal access to employment (child care facilities).

Cluster 1: Chile, Panama, Venezuela, Argentina

Strategies	Proposals for Action	Agents
Promote job recruiting of women in the productive sector.	Design financial and health systems related to reproduction so cost of employing men or women is indifferent for employer.	ILO, Government, Dept. of Women's Affairs, Min. of Labour
	Develop workshops and seminars for employers and trade unions on gender sensitization.	ILO, NGOs, Government, Dept. of Women's Affairs, Education Institutions
	Establish "affirmative action" programs and methods.	Government, Dept. of Women's Affairs
	Develop recruitment systems that will ensure the establishment of a critical mass of women resources at all occupational levels to thus diminish "glass ceiling" effects.	Government, Industrial Associations
	Promote the establishment of female unions and leadership programs for women.	ILO, NGOs, Trade Unions, Labour Organizations, Dept. of Women's Affairs
	Promote labour legislation to facilitate the organization of "affirmative action" programs.	ILO, Dept. of Women's Affairs
Assist women workers in achieving equal access to employment	Extend coverage and quality of pre-schooling.	Ministry of Education
	Provide support services in child care by promoting the establishment of community-related services with existing resources.	UNICEF, ILO, Government, Internat. Organizations, Dept. of Women's Affairs, Min. of Health and Labour
	Develop sensitization to promote equal distribution of home chores among all family members.	UNICEF, Government, Mass Media
	Increase women's training programs in managerial areas.	UNIDO, ILO, IDB, Dept. of Women's Affairs
	Develop labour force needs assessment studies in the more dynamic fields in manufacturing in countries of the cluster.	UNIDO, ILO, Dept. of Women's Affairs

Strategies	Proposals for Action	Agents
	Establish legislation to regulate conditions of flexibility in the labour market.	ILO, Government
	Develop studies on materials, textbooks and teaching programs to eliminate gender discrimination.	UNICEF, Min. of Education, Government
Increase qualification of labour force	Develop work-relevant training programs with participation of the industrial sector.	ILO, Gvnt. Min. of Labour, Industrial Assoc.

5.2 CLUSTER 2: Colombia, Ecuador, Peru, Costa Rica, Uruguay

MAIN CHALLENGES

1. Integrate women to the export and modern service sector.

2. Diminish M/F disparities in employment in the tertiary sector.

3. Promote participation of women in administrative positions and other managerial levels in the most dynamic sectors of industry by extending coverage of secondary and tertiary education.

4. Promote the gradual transformation of informal enterprises into viable community enterprises, and foster female participation in the process.

5. Train women becoming part of the increasing labour force due to urbanization.

6. Train women to face the technological changes and challenges brought forth by evolution of management techniques.

7. Absorb unemployment arising from privatization.

CONSTRAINTS

1. Lack of technical and vocational training to cope with advanced technologies and modern production methods.

2. Lack of correlation between the professions that women pursue and the labour requirements of the manufacturing sector.

3. Lack of a critical mass of women at the intermediate occupation and decision-making levels.

4. Absence of small businessmen/women networks to foster the operation of the informal sector; to provide integrated technical assistance to producers; and to promote the eventual organization of viable community enterprises.

Cluster 2: Colombia, Paraguay, Ecuador, Peru, Costa Rica, Uruguay

Strategies	Proposals for Action	Agents
Integrate women to the transformation process of the economy in conditions of equality.	Develop studies to identify potential agro-industrial fields for export.	UNIDO, Government, ITC
	Establish incubators for agro-industrial enterprises with female participation.	NGOs, Government
	Promote the development of industrial associations with access to common services.	UNIDO, Government, Industrial Assoc.
Promote female participation in the expansion of the Export sector (Trade agreements)	Develop intensive training programs in skills and abilities in priority fields of the export manufacturing sector.	UNIDO Government, Min. of Labour and Education, Export Assoc. Education Institutions
	a. establish scholarships for on and off the jobs training programs. b. reform secondary and vocational education programs to assimilate new technologies. c. establish scholarship/promotion plans to increase women's enrollment in university/vocational programs that are a priority for the manufacturing and services sectors.	UNIDO, Government, Min. of Labour and Education, Export Assoc., Education Institutions
	Link science and technology resources to industry to support the latter mentioned programs.	C&T Funds and Ind. associations
	Create incentives for industries that assume promotion policies related to female training.	Government, Dept. of Women's Affairs
Sensitize the industrial sector	Develop cooperative programs between industry and education to recruit the best female students.	UNIDO, Government, State Financial System

Strategies	Proposals for Action	Agents
Support the informal sector with economic incentives, technical assistance and credit and give priority to businesses with female participation	Organize workshops and seminars for union managers to eliminate job discrimination between men and women.	UNESCO, Government, NGOs
	Establish low interest credit linked to training and technical assistance for small businesses with equal percentage of women/men workers.	UNIDO, Government
	Support transformation of informal enterprises towards new field of development through the establishment of cooperation agreements with the formal sector.	UNIDO, Government, Industrial Assoc. BID
	Develop integrated training and technical assistance programs for small businesses to increase their competitiveness. Training programs should include negotiation and transactional techniques.	UNIDO, Trade Unions
Support the informal sector with economic incentives, technical assistance and credit, and give priority to businesses with female participation.	Promote the establishment of community business associations to improve their contract conditions with the formal sector	UNIDO, ILO Industrial Assoc. BID, OIT
	Establish the necessary legislation changes to increase female access to resources such as training, etc.	ILO, Government, Min. of Justice
Promote women's access to managerial and administrative positions	Training women in management and leadership skills	UNIDO, Government, Dept. of Women's Affairs

5.3 CLUSTER 3: El Salvador, Guatemala, Honduras

MAIN CHALLENGES

1 Strengthen women's participation in the most competitive occupational groups and activities.

2. Insure capability in women for flexibility and adjustment to changes and standards of modern industrial processes.

3. Increase average schooling of female workers and their opportunities for training.

4. Benefit from growth of the service sector to increase female participation.

5. Strengthen businesses in the informal sector by linking them to the formal sector.

6. Help women in their transition form agriculture to industry through agro-industrial activities.

CONSTRAINTS

1. Very low levels of education in the workforce.

2. Rigid and inadequate legal system to promote women's participation in the labour market.

3. Weak negotiation mechanisms to access and promote women in the labour market.

4. Lack of services to support the working woman.

5. Population with very low income levels, particularly in women-headed households.

Cluster 3: El Salvador, Guatemala, Honduras

Strategies	Proposals for Action	Agents
Increase coverage and quality of education in all its levels, and with emphasis in primary education and the rural sector.	Establish scholarship programs to promote women's access to basic and vocational education.	IDB, Government, Min. of Education, Dept. of Women's Affairs
	Establish incentive programs for teachers who teach in schools in high risk zones.	IDB, UNICEF, UNESCO, Government
	Modify textbooks that include family themes to promote equality in work and payment.	IDB, UNIDO, Government, Ministry of Education
	Revise the pertinence of the curricula vis a vis the needs and requirements of industrial reconversion and service sector.	UNESCO, Industrial Assoc., Ministry of Education

Strategies	Proposals for Action	Agents
Enhance female insertion in the agricultural activity and in the growing industrial sector with emphasis in the most competitive activities.	Devise and implement cooperation programs between educational system and industry to hire the best female students from vocational schools and universities in the agro-industrial and enterprise sectors.	Government, Industrial Assoc., Ministry of Education
	Promote legislation to eliminate restrictions posed to women related access to credit, land technical assistance.	UNICEF, IDB, Women's Affairs
	Orient vocational education programs to most dynamic sectors.	UNESCO, Government, Ministry of Education
	Design and develop integrated technical assistance programs for the informal sector.	IDB, UNIDO
Improve women's working conditions in the informal sector.	Promote transformation of informal sector enterprises to feasible community businesses.	IDB, UNIDO
	Set forth guidelines for technological transference, training and credit for informal sector businessmen/women and promote cooperative liaisons between them.	IDB, UNIDO, Government

5.4 CLUSTER 4: Brazil, Mexico, Trinidad and Tobago

MAIN CHALLENGES

1. Improve women's working conditions and competitiveness in the labour market, especially in those sectors where they concentrate.

    a. Address the deteriorating working conditions in the maquila and in home-based work.
    b. Promote agreements between the export processing zones (EPZ) and the local manufacturing sector.
    c. Promote employment alternatives for women of the maquilas.

2. Maintain and improve women's entry into the labour market by broadening the activities in which she participates.

    a. Increase women's employment opportunities enabling them to establish small manufacturing businesses.
    b. Eliminate gender biases in industrial training institutions.

c. Eliminate gender biases to access specific resources, such as credit, training and extension services.
d. Advance female integration in the use of high technology.
e. Train women to absorb the impacts of privatization.
f. Benefit from the diversification of the tertiary and the industrial sectors, and specially of modern services, a consequence of trade agreements.

CONSTRAINTS

1. Insufficiencies in current legislation.

2. Lack of information on employment opportunities for women.

3. Low access to credit and vocational training without gender biases.

Cluster 4: Brazil, Mexico, Trinidad and Tobago

Strategies	Proposals for Action	Agents
Increase productivity and income of women in the service and informal sectors, diversifying her occupational insertion in the sectors.	Improve necessary level of information so that women can access to better and more diversified labour positions.	ILO, Government, Min. of Labour, Dept. of Women's Affairs
	Train female labour force in non-traditional activities and for those required by the production sector.	IDB, ILO, UNIDO, Government
	Devise and implement incentive systems for industries that adopt training and employment policies for women.	IDB, Government, Unions, Industrial Assoc.
	Develop integrated strategies to improve women's employment opportunities.	-"-
Increase value added of the maquila.	Promote cooperation between Export Processing Zones and the local manufacturing sector.	UNIDO, IDB
Expedite women's integration in the use of high technology.	Include specific training areas in formal education that will allow women to participate in high technology sectors.	UNIDO, ILO, Min. of Education, Government
Improve women's labour conditions in the maquila.	Promote revision of existing legislation to ensure quality employment in highly competitive labour markets.	UNIDO, ILO, Ministry of Education, Government
	Promote changes in female role stereotypes.	-"-

Strategies	Proposals for Action	Agents
Increase female enrollment in tertiary education.	Design information programs on benefits derived from women's education.	ILO, Government, Dept. of Women's Affairs
	Increase and focus social expenditure in education.	Government, Ministry of Education
	Design and establish incentive plans to support women's enrollment and survival in vocational, secondary and tertiary education (scholarships, affirmative discrimination).	IDB, Government, Min. of Education, Education Credit Offices
	Establish means to oversee and guarantee enforcement of laws related to women's equal opportunities, especially in the labour market.	OAS, ILO, Government, Dept of Women's Affairs
Improve competitiveness of the informal sector.	Develop technical and economic assistance programs for the informal sector to improve their competitiveness.	UNIDO, ILO, IDB

5.5 CLUSTER 5: Barbados, Jamaica

MAIN CHALLENGES

1. Promote greater participation of women in managerial and decision-making positions.

2. Promote cooperation links between EPZ and the local manufacturing sector, with special emphasis in areas that show a competitive edge.

3. Strengthen female participation in the labour market by promoting her diversification into sectors and occupations, thus improving her income and working conditions.

4. Provide employment opportunities and access to positions with higher productivity and better income to those women that increase their skill levels.

5. Devise and establish systems that will increase opportunities for women to become entrepreneurs in the manufacturing and service sectors.

6. Expand employment opportunities for women, especially in the manufacturing and service sectors.

7. Improve female employment conditions in the EPZs.

8. Participate in technical changes, implementation of modern methods of organization and broadening of the tertiary sector.

CONSTRAINTS

1. Lack of an effective scheme to supervise and enforce labour legislation, especially in the EPZs.

2. Gender biases in the demand and employment systems of the manufacturing sector.

3. Barriers to female access to productive resources, especially to credit.

4. External barriers to economic expansion and job generation.

Cluster 5: Barbados, Jamaica

Strategies	Proposals for Action	Agents
Promote women's participation in managerial and decision-making positions.	Undertake studies on determinant factors of female success to reduce M/F disparities.	ILO, IDB, World Bank, ECLAC
	Provide training for the private sector to eliminate gender bias in recruitment. Sensitize employers on advantages to have both men and women in managerial positions.	ILO, Government, Dept. of Women's Affairs
Diversify female participation in various fields of manufacturing sector.	Provide vocational orientation for women to improve their insertion in other fields.	UNESCO, ILO, Government, Dept. of Women's Affairs, Min. of Education
	Design and implement training systems in skills and abilities related to new technologies in the most dynamic areas of the manufacturing sector.	UNIDO, Government, Industrial Assoc.
	Develop labour training systems linked to industry and with emphasis on women.	-"-
	Reform secondary and vocational education to include training for the most dynamic sectors.	UNIDO, ILO Government, Min. of Education
	Develop training programs for women in the use of high technologies.	UNIDO, ILO, IDB
Improve labour conditions in the EPZs.	Promote cooperation agreements between industries in the EPZs and local businesses by establishing contract and credit incentives.	UNIDO, IDB, Government, Industrial Assoc., Small Business Assoc.

Strategies	Proposals for Action	Agents
Maintain and improve women's position in the present labour market.	Analyze successful experiences in women's access to credit.	UNIDO, IDB, ECLAC
	Promote affirmative discrimination in the private sector, political parties, unions, etc.	Government, Dep. of Women's Affairs, Mgmt.
	Design and develop training systems for men and women that include multi-skill programs.	UNIDO, IDB, Government
	Develop management and administration training programs.	UNIDO, ILO, Government, NGOs
	Study educational credit systems within the formal education system based on labour experience obtained in the production sector.	UNESCO, Government, Educational Institutions
Promote and facilitate women's access to higher education.	Establish incentive systems to promote enrollment and survival of women in vocational and tertiary education.	UNESCO, IDB, Government, Min. of Education
	Establish data banks with segregated labour information by sex, especially on new workers and by skill level. Enable employers to know their female labour force potential.	UNIDO, ILO, ECLAC, Government, Min. of Labour

5.6 REGIONAL ANALYSIS

MAIN RESTRICTIONS INFERRED FROM THE RESULTS OBTAINED FROM THE SYSTEMS

1. The analysis of System VI lead to the conclusion that, although there is apparent legal equality among men and women, law enforcement is either poor or nonexistent.

2. The analysis of System IV indicates that M/F disparity in education is being reduced, yet problems related to quality and orientation that produce gender differentiation still prevail.

3. The analysis of Systems I and II--which include labour market variables and indicators--reveals important conclusions for the region as a whole:

   a. Female participation in manufacturing is low (16%) in comparison to other regions; this can be clearly established in the labour market systems (I and II).

   b. Female labour force centers in the tertiary sector and within this, in services (77% and 59 %, respectively).

c. There is gender occupational segmentation; thus, women are concentrated in the informal sector. Furthermore, within it, as well as in the formal sector, women generally work on low productivity and poorly paid activities.

d. Women's access to managerial and decision making positions is very limited.

e. High gender disparity in wages and incomes.

f. In general, there is a high disparity in the forms of male/female insertion in the labour market in the region.

4. The analysis of System IV reveals low political and parliamentary representation (7%) for women.

5. The region can foresee a more dynamic development of the manufacturing sector as a result of significant increase in exports.

6. The region's industrial sector is characterized by low productivity in the manufacturing sector, with a predominance of women working in the least dynamic areas and on poorly qualified positions.

Regional Analysis: LAC Region

Strategies	Proposals for Action	Agents
Achieve gender equality in labour and occupational opportunities.	Study in each of the typology groups, successful experiences that have helped women's participation in the labour market under competitive conditions. Consider the six systems used in the study (credit, micro-enterprises, network)	UNIDO, ECLAC, IDB, Women's Affairs
	Develop and design alternative systems of child care centers, with community participation.	IDB, Government, Dept. of Women's Affairs, Min. of Health
	Analyze experiences (within and outside the region) on the introduction on legislation to promote gender equity	ILO, World Bank, Women's Affairs, IDB
Increase productivity and income in women's labour force	Create regional information networks on technical assistance projects that are women related, to evaluate impact and benefits and thus avoid duplicating efforts.	UNIDO, IDB, ILO, UNICEF, UNESCO, SECAB, ALADI
	Undertake a regional programme to measure the impact of technical change on informal workers with emphasis on women.	UNIDO, ILO, Labour offices, OAS

Strategies	Proposals for Action	Agents
Promote and facilitate women's role in industrial restructuring	Design and implement a regional programme that will take into account at least one country per cluster, on issues such as : labour force needs according to economic activity, group and occupational category, level and type of training.	UNIDO, ILO, IDB, NGOs, Government
Promote changes and gender stereotypes, in order to reduce occupation segmentation	Design and implement sensitization programs on gender perspective for formal and informal education and oriented to employers and employees.	Government, Dept. of Women's Affairs, Business Assoc., Educational Institutions
	Implement regional projects on teaching programs and materials to encourage the revision of existing gender stereotypes.	UNICEF, IDB, SECAB, Min. of Education
	Undergo studies on successful experiences in the improvement of women's political participation, and promote their implementation in the region.	IDB, OAS, SECAB, Andean Parliament, Government
Disseminating information on the situation of women in the region with respect to the six systems analyzed in the present study	Complete a data bank on women's employment on manufacturing created for this study and establish a system for maintenance and updating.	ECLAC, UNIDO, IDB
	Undertake a survey of industrial enterprises in one country per typology group. This will provide a diagnosis on existing restrictions to increase women's participation in industrial employment	UNIDO, ILO, Ministry of Labour, NGOs
	Undertake studies to identify potential for agro-industrial fields with female participation.	UNIDO, ITC, Entrepreneurial Associations

ANNEXES

Annex A.1

REVEALED COMPARATIVE ADVANTAGE OF LATIN AMERICA IN THE MANUFACTURING SECTOR 1980-1990

SECTOR	INDEX
Leather	5.50
Shoes	3.74
Iron and Steel	3.42
Chemical Products	1.98
Explosives	1.61
Wood and Cork Products	1.48
Fertilizers	1.22
Rubber Manufactures	1.16
Textiles	1.14
Plastic Products	1.12
Non-metallic Manufactures	1.11
Travel Goods	1.10

Source: IDB Economic and Social Progress of Latin America, 1992 Report

Annex A.2

MAJOR HIGH TECHNOLOGY EXPORTS IN LATIN AMERICA AND THE CARIBBEAN (US$m)

SECTOR	VALUE
Non-electrical Machinery	5,842
Transport Equipment	5,381
Chemical Products	2,526
Electrical Machinery and Appliances	1,972
Plastic Materials	1,085
Professional and Scientific Instruments	556
Pharmaceutical Products	243
Total	17,605

Source: IDB Economic and Social Progress of Latin America, 1992 Report

Annex A.3

SOURCES FOR VARIABLES AND INDICATORS

No.	Variables and Indicators	Sources
I. LABOUR FORCE CHARACTERISTICS		
Variable 1.1. Size and distribution of Economically Active Population (EAP)		
1.1.1.	Women's economic activity rate (15 years +)	ILO (1) Table 1; WISTAT (2); ECLAC (3)
1.1.2.	Index male/female disparity in economic activity rate (15+ years)	ILO Table 1; WISTAT
1.1.3.	Women's economic activity rate (15-64 years)	ILO Table 1; WISTAT; AID (4)
1.1.4.	Index male/female disparity in economic activity (15 - 64 years)	ILO Table 1; WISTAT; AID
1.1.5.	Women's participation rate in the agricultural sector	ILO Table 2; WISTAT; ECLAC
1.1.6.	Index male/female disparity in EAP participation rate in agriculture	ILO Table 2; WISTAT; ECLAC
1.1.7.	Women's participation rate in the tertiary sector (commerce and services)	WISTAT; ECLAC
1.1.8.	Index male/female disparity in EAP participation rate in the tertiary sector	WISTAT; ECLAC
1.1.9.	Rate of Growth of Female EAP (1970 - 1990)	AID
Variable 1.2 Size and distribution of employment		
1.2.1.	Women's employment rate	ILO Table 3A; ECLAC
1.2.2.	Index of male/female disparity in employment rate	ILO Table 3A
1.2.3.	Women's employment rate in non-agricultural activity	ILO Table 4; AID
1.2.4.	Index of male/female disparity in non-agricultue activity	ILO Table 4; AID
1.2.5.	Women's employment rate in tertiary sector	ILO Table 3B
1.2.6.	Index of male/female disparity in tertiary employment	ILO Table 3B
1.2.7.	Women's employment rate in services	ILO Table 3B; FLACSO (5)
1.2.8.	Index of male/female disparity in services	ILO Table 3B; AID; FLACSO
1.2.9.	Women's total employment rate	ILO Table 3A; ECLAC; FLACSO
1.2.10	Rate of Growth of Women's employment rate in non-agricultural activity	AID
Variable 1.3. Employment status		
1.3.1.	Women's self employment rate	FLACSO, ECLAC
1.3.2.	Index of male/female disparity in sel employment	FLACSO, ECLAC
1.3.3.	Women's unpaid family employment rate	FLACSO, ECLAC
1.3.4.	Index of male/female disparity in unpaid family employment	FLACSO, ECLAC
Variable 1.5. Occupational status		
1.5.1.	Women's participation rate in professional and technical positions	ILO Table 3C; FLACSO, ECLAC
1.5.2.	Index of male/female disparity in professional and technical positions (category 0/1)	ILO Table 3C; FLACSO, ECLAC
1.5.3.	Women's participation rate in administrative and managerial positions	ILO Table 3C; FLACSO, ECLAC
1.5.4.	Index of male/female disparity in administrative and managerial positions (category 2)	ILO Table 3C; FLACSO, ECLAC
1.5.7.	Women's participation rate in non-agricultural activities	ILO Table 3C; FLACSO, ECLAC
1.5.8.	Index of male/female disparity in non-agricultural activities (category 7+8+9)	ILO Table 3C; FLACSO, ECLAC
1.5.11	Women's participation rate as clerks	ILO Table 3C; FLACSO, ECLAC
1.5.12	Index of male/female disparity as clerks (category 3)	ILO Table 3C; FLACSO, ECLAC
1.5.13	Women's participation rate as sales workers	ILO Table 3C; FLACSO, ECLAC
1.5.14	Index of male/female disparity as sales workers (category 4)	ILO Table 3C; FLACSO, ECLAC
1.5.15	Women's participation rate as service workers	ILO Table 3C; FLACSO, ECLAC
1.5.16	Index of male/female disparity as service workers (category 5)	ILO Table 3C; FLACSO, ECLAC
II. INDUSTRIAL LABOUR FORCE CHARACTERISTICS		
Variable 2.1. Size and distribution		
2.1.1.	Participation rate of women in manufacturing (EAP)	ILO Table 2A
2.1.2.	Index of male/female disparity in EAP participation rate in manufacturing	ILO Table 2A
2.1.3.	Participation rate of women in manufacturing employment	ILO Table 5A; ECLAC
2.1.4.	Index of male/female disparity in participation rate in manufacturing employment	ILO Table 5A; ECLAC
2.1.5.	Rate of women's involvement in the food, beverages and tobacco sub-sector (31)	ILO Table 5B; ECLAC
2.1.6.	Index of male/female disparity in manufacturing employment rate in sub-sector 31	ILO Table 5B; ECLAC
2.1.7.	Rate of women's involvement in the textile, garments and leather sub-sector (32)	ILO Table 5B; ECLAC
2.1.8.	Index of male/female disparity in manufacturing employment rate in sub-sector 32	ILO Table 5B; ECLAC
2.1.9.	Rate of women's involvement in metal, machinery and equipment production (38)	ILO Table 5B; ECLAC
2.1.10	Index of male/female disparity in manufacturing employment rate in sub-sector 38	ILO Table 5B; ECLAC
2.1.11	Women in total manufacturing employment	ILO Table 5A; ECLAC
III. ECONOMIC AND INDUSTRIAL ENVIRONMENT		
Variable 3.1. Level of economic development		
3.1.1.	Logarithm of GDP/capita	UNIDO (6)
3.1.2.	Share of the agricultural sector in GDP	UNIDO
3.1.3.	Share of the tertiary sector in GDP	UNIDO
3.1.4.	Share of MVA in GDP	UNIDO
3.1.5.	Share of exports in GDP	UNIDO
3.1.7.	Inflation rate (mean of price index for last three years)	UNIDO
3.1.8.	Share of government expenditure in GDP	UNIDO
3.1.9.	GDP per capita	UNIDO
3.1.10	Food security index	IFAD (7)
3.1.11	Integrated poverty index	IFAD

SOURCES FOR VARIABLES AND INDICATORS

Variable 3.2. Level of industrial development	
3.2.1. Logarithm of MVA/capita	UNIDO
3.2.2. Share of manufactured goods in total exports)	UNIDO
3.2.3. Share of the food and textile sub-sectors (31 and 32) in total MVA	UNIDO
3.2.4. Share of metal, machinery and equipment products (38) in total MVA	UNIDO
3.2.5. MVA per capita	UNIDO
3.2.6. Annual growth rate for industry (1980-90)	The World Bank (8)
3.2.7. Annual growth rate for services (1980-90)	The World Bank
3.2.8. Energy consumption per capita (kilograms in petroleum equivalent, 1990)	The World Bank
Variable 3.3. Infrastructure	
3.3.2. Length of road per 1000 square kilometres	South America, Central ...1993 (9)
3.3.3. Number of radio receivers per 1000 inhabitants	South America, Central ...1993
3.3.4. Government expenditure on basic human needs (%)	The World Bank
3.3.5. Government expenditure on education (%)	The World Bank
IV. SOCIAL AND DEMOGRAPHIC CONDITIONS	
Variable 4.1. Size and distribution of population	
4.1.1. Urbanization population (%)	WISTAT
4.1.3. Index of male/female disparity in life expectancy at birth	WISTAT
4.1.4. Total fertility (births per women)	WISTAT
4.1.5. Mean age at first marriage for women	WISTAT
4.1.8. Female headed households (%)	WISTAT; FLACSO
Variable 4.2. Access to education	
4.2.1. Index of male/female disparity in literacy rates	WISTAT; FLACSO
4.2.2. Female primary enrolment rate	WISTAT; FLACSO
4.2.3. Index of male/female disparity in primary school enrolment rate	WISTAT; FLACSO
4.2.4. Female secondary enrolment ratio	WISTAT; FLACSO
4.2.5. Index of male/female disparity in secondary school enrolment rate	WISTAT; FLACSO
4.2.6. Female tertiary enrolment ratio	WISTAT; FLACSO
4.2.7. Index of male/female disparity in tertiary school enrolment rate	WISTAT; FLACSO
4.2.11 Index of male/female disparity in technical subjects enrolment rate	WISTAT; FLACSO
4.2.12 Primary school achievement index	WISTAT; FLACSO
V. POLITICAL ENVIRONMENT	
Variable 5.1 Distribution of power	
5.1.1. Women's share in parliamentary representation (%)	Inter-Parliamentary Union (10)
5.1.2. National Machinery for the Advancement of Women	DAW (11)
VI. LEGAL AND INSTITUTIONAL FRAMEWORK (qualitative = dummy variables)	
Variable 6.1. Legal protection	
6.1.1. Ratification of the International Convention on elimination of all discrimination against women (CEDAW)	WISTAT
6.1.2. Ratification of ILO Convention 100 - Equal renumeration, 1951	ILO (12)
6.1.3. Ratification of ILO Conv. 111 - Discriminstion (Employment and Occupation), 1958	ILO
6.1.4. Ratification of ILO Conv. 156 - Workers with Family Responsibilities, 1981	ILO

(1) Database of the International Labour Organization (ILO), Geneva
(2) United Nations Database on Women's Indicators and Statistics (WISTAT)
(3) United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago. Statistical and Projection Division
(4) U.S. Agency for International Development (AID). Gender and Generation in the World's Labour Force published by the Office of Women in Development, Washington
(5) Faculted Latinoamericana de Ciencias Sociales (FLACSO), Santiago. Mujeres Latinoamericanas en Cifras
(6) Database of the United Nations Industrial Development Organization (UNIDO)
(7) International Fund for Agricultural Development (IFAD), Rome. The State of World Rural Poverty, A Profile of Latin America and the Caribbean
(8) The World Bank, World Development Reports, Washington
(9) South America, Central America and the Caribbean 1993, Europa Publications Limited)
(10) Inter-Parliamentary Union. Women and Political Power, Geneva 1992
(11) Division for the Advancement of Women (DAW), 1993. Directory of National Machinery for the Advancement of Women, Vienna Machinery for the Advancement of Women, Vienna
(12) International Labour Organization (1993). Lists of Ratifications by Conventions and by Country. Report II. Part 5. Geneva

ANNEX A.4

List of Participants in Validation Workshop, 2-3 August 1994
Chile, Santiago

ABRAMO, Lais
Consultora permanente
Organización Internacional del Trabajo
OIT
Luis Carrera 1131, Vitacura
Santiago, Chile
tel. 2012727

ARRIAGADA, Irma
Oficial de Asuntos Sociales
División de Desarrollo Social
CEPAL
Vitacura 3030
Santiago, Chile
tel. 2102532

ALMERAS, Diane
Oficial de Asuntos Sociales
Unidad Mujer y Desarrollo
CEPAL
Vitacura 3030
Santiago, Chile
tel. 2102691

BARRAZA de Sandra Rebeca Vásquez
Jefe Sección Estudios Sociales
Fundación Salvadorena para el Desarrollo
Económico y Social (FUSADES)
El Salvador
tel. 783366

CORBALAN, Iris
CELADE
Vitacura 3030
Santiago, Chile
tel. 2102020

CONTRERAS, Ivan
Director para Chile de ONUDI
CEPAL
Vitacura 3030
Te. 2324183

FEIJOO, Maria del Carmen
Socióloga
CONICET - UNICEF
Avda. Caseros 450 - 2 C
Buenos Aires, Argentina
tel. (01)307 1219

GALVEZ, Thelma
Subdirectora Técnica
Instituto Nacional de Estadísticas
Avda. Bulnes 418
Santiago, Chile
tel. 672 2797

GLASGOW, Sandra
Manager, Entrepreneurial Centre
College of Arts, Science and Technology
237 Old Hope Road
Kingston 6, Jamaica, W.I.
Tel. 809 927 1531

JUSIDMAN, Clara
Director Asesores en Desarrollo
Social
Manuel M. Ponce 322, 1 piso
Mexico, D.F. Mexico
tel. (525) 662 3690

KRAWCZYK, Miriam
Jefa
Unidad Mujer y Desarrollo
CEPAL
Vitacura 3030
Santiago, Chile
tel. 2102672

MEZZERA, Jaime
Especialista Pequeña Empresa
Organización Internacional del Trabajo
Luis Carrera 1131
Santiago, Chile
tel. 2012727

POLLACK, Molly
Economista
Consultora CEPAL/ONUDI
Vitacura 3030
Santiago, Chile
tel. 2102235

RAMOS, Joseph
Director
División de Desarrollo
Productivo y Empresarial
CEPAL Vitacura 3030
Santiago, Chile
tel. 2102644

ROMAGUERA, Pilar
Economista
Depto. Ingeniería Industrial
Universidad de Chile
República 701
Santiago, Chile
tel. 6894403

TODARO, Rosalba
Economista
Centro de Estudios de la Mujer
Purísima 353
Santiago, Chile
tel. 7771194

MACARIO, Carla
Oficial de Asuntos Ecomómicos
CEPAL
Vitacura 3030
Santiago, Chile
tel. 210 26 52

PARDO, Lucía
Académica
Universidad de Chile
Diagonal Paraguay 257, of. 1503
Santiago, Chile
tel. 2228521

SALAZAR de Buckle, Teresa
Consultora ONUDI
Químico, especializada en Análisis de
Sistemas Industriales sectoriales
Unidad de la Mujer en la Industria
Vienna, Austria
tel. 21131-3874

SCHOLNIK, Susana
Demógrafa
CELADE
Santiago, Chile
tel. 2102005

VALOTTA de Maertens, Claudi
Jefa Subrogada Management Co-ordinator
and Monitoring Unit ONUDI
Vienna, Austria
tel. 21131-3612

VALENZUELA, Maria Elena
Encargada área Mujer
SERNAM
Rosa Rodríguez 1375, 6 Piso
Santiago, Chile
tel. 695 3325

VAN DER AA, Pauline
Experta Asociada
Unidad Mujer y Desarrollo
CEPAL
Vitacura 3030
Santiago, Chile
tel. 2102100

GLOSSARY

Administrative and managerial workers (major group 2)

According to the International Standard Classification of Occupations (ISCO-1968), major group 2 includes administrative and managerial workers, such as legislative officials and government administrators, as well as managers.

Average schooling

Average number of school years completed by persons aged 25 years and older.

Critical mass

Pool of human resources available to fill vacancies at higher levels.

Economically active population

As defined by the International Labor Organization (ILO), the economically active population comprises all persons of either sex who furnish labour for the production of economic goods and services as defined by the United Nations systems of national accounts and balances, during a specified time period. This includes all production, whether for the market, for barter or for own consumption, and whether consisting of goods or services. .

Education, primary

First level of schooling (level one according to the International Standard Classification of Education, ISCED), whose major function is to provide the basic elements of education.

Education, secondary

Second level of schooling (levels two and three according to ISCED), built on at least four years of first level instruction. It provides general or specialized instruction, or both, such as intermediate and secondary schools, first level normal schools and vocational/technical schools.

Education, technical/vocational

Trains students to work jobs in the production or service sectors.

Education, tertiary

Third level schooling (levels six and seven according to ISCED), such as universities, teachers' and other colleges, which require a degree from secondary school or equivalent, as pre-requisite for admission.

Employee

According to the classification by status, it defines a person who receives a remuneration (in money or in kind) for working for a public or private employer. In general, it refers to someone working in the formal or modern sector.

Employment

Employment is used in the present document to describe that part of the economically active population which has employee status.

Expenditures for education

Expenditures made for the provision, administration, inspection and support of schools at all levels, such as primary, secondary, technical and vocational schools; colleges and universities.

Expenditures, government

Funds spent by all offices, departments, establishments and other organisms in the various government levels.

Fertility rate

Average number of children born alive to a woman during her lifetime, if she were o give birth at each age according to the prevailing fertility rates for each age.

Formal manufacturing sector

The formal manufacturing sector has been defined as comprising registered firms. Usually, the labour force in these firms would have employee status.

Formal sector

The division between the formal and informal sector is not clear-cut, although it has been a subject of much debate in which ILO has played a prominent part. For the purpose present analysis, the formal--or modern--sector has been defined as activities which take place in registered enterprises. The labour force in formal sector enterprises would normally consist of employees.

GDP per capita and growth rates

The gross domestic product divided by the population. The annual GDP per capita is expressed in US dollars, at current prices. The growth rates of the GDP per capita are the average annual rates of change, computed by adjusting the trend lines to the logarithmic values of the GDP per capita, at constant market prices, for each year of the period under consideration.

Gross domestic product (GDP)

Total value of the goods and services produced in the economy of a country, either by residents or by non-residents, regardless of the nationality of the owners of the production factors.

Indicator

In the present document, the term indicator is applied to statistically measurable variables of women's role. An example of an indicator would be the gross domestic product per capita which is one measure of overall economic development.

Industrial sector

This sector is often defined as comprising--apart from the manufacturing sector--energy production, mining and construction. In most countries, manufacturing is by far the most important activity in this sector. In the present document "industrial" is used as a synonym for manufacturing.

Informal/traditional sector

This sector comprises activities which are not included in the official data collection systems and are outside the reach of legal and institutional sphere of influence. In the study, the informal sector also includes casual labour.

Labour force

Economically active population, including the armed forces and the unemployed, but excluding house wives and other unpaid workers.

Latin America and the Caribbean - LAC

It comprises all countries in the Western Hemisphere located to the south of the United States of America.

Male/female disparity

Participation index of female participation with respect to male participation, expressed in the following form:
[Male participation in X - female participation in X / Male participation in X]

Manufacturing Value Added - MVA

Total value of manufacturing production, less value of inputs purchased from other sectors.

Manufacturing sector

Manufacturing is defined as the mechanical or chemical transformation of inorganic or organic substances into new products, by machines or by hand, in a factory or in the worker's home. The definition usually includes assembly of component parts of manufactured products.

Part-time work

According to ILO this is work on a regular or voluntary basis for a daily or weekly period of substantially shorter duration that the current or normal statutory working hours.

Participation rate

In this study, participation rate in a specific economic activity is calculated as the ratio of workers in a sector to total employed population.

Population of working age

All persons of either sex between the ages of 16 and 65 years, physically capable of working.

Poverty lines

Income levels below which it is not possible to guarantee neither a minimum adequate diet, nor the essential non-nourishing requirements of an individual.

Professional and technical workers (major group 0/1)

According to ISCO-1968, major group 0/1 includes professional technical and related workers, e.g. , physical scientists, architects, medical and dental workers, statisticians, economists, jurists, teachers, authors, artists and sportsmen.

Scientist

Person who has completed scientific or technical training-- generally having a degree in a scientific field--and who works professionally on research and development activities, including the directors and managers of such activities.

Segregation

It is assumed that women's participation in the economy takes place on unequal terms and is characterized by patterns of "vertical" and "horizontal" segregation. "Vertical" or industrial segregation refers to the tendency for female participation to concentrate in a limited number of manufacturing activities, mainly light industries characterized by assembly-type production which requires a large amount of cheap unskilled labour. "Horizontal" or

occupational segregation describes the tendency for women to be over-proportionately represented in low-skilled production jobs at the lower end of the occupational hierarchy.

Status

The status of an economically active individual with respect to his or her employment, that is, whether the person is (or was, if unemployed) an employer, self-employed, employee, unpaid family worker, or a member of a producer's co-operative.

Technicians

Workers in scientific research and development activities, who had technical or vocational training during no less than three years after secondary schooling.

Tertiary sector

According to the International Standard Industrial Classification of all Economic Activities (ISIC-1968) this sector comprises wholesale and retail trade, restaurants and hotels; transport, storage and communications; financing, insurance, real estate and business services; community, social and personal services.

Transition from the first to the second level of education

Number of pupils who undertake secondary education as percentage of the total enrolment in last grade of elementary schools the year before.

Variable

In the context of the present study, the term variable is applied to describe a factor influencing the social position and economic role of women (in the terminology of sectoral typologies, the term is 'component'). Variables are statistically measured through indicators, and thus describe a larger entity that these.

Unemployment

All persons above a certain age who do not hold a paid job or are not self-employed; that are available for working on a paid job or self-employment; and that have taken specific steps to search for a paid job or self-employment.

Workers (major group 7/8/9)

According to ISCO-1968, major group 7/8/9 includes production and related workers, transport equipment operators and labourers. Examples are miners, workers in manufacturing, artisans and construction workers.

LIST OF ABBREVIATIONS

ALADI	Asociación Latinoamericana de Integración
ATPA	Andean Trade Preferences Act
CBI	Caribean Basin Initiative
CEDAW	Commission of Discrimination Against Women
EAP	Economically Active Population
ECLAC	Economic Commission for Latin America and the Caribbean
EPZ	Export Processing Zone
FLACSO	Facultad Latinoamericana de Ciencias Sociales
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
IDB	Inter-American Development Bank
IICA	Intituto Interamericano para la Cooperación en Agricultura
ILO	International Labour Organization
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
MERCOSUR	Mercado Comun Suramericano
MVA	Manufacturing Value Added
NAFTA	North American Free Trade Area
NGO	Non-Government Organization
NIC	Newly Industrialized Country
NIEs	Newly Industrialized Economies
OAS	Organization of American States
OECD	Organization for Economic Cooperation and Development (European countries plus Canada, USA and Japan)
PREALC	Programa de Empleo para América Latina y el Caribe
SECAB	Secretaría Ejecutiva del Convenio Andres Bello
TFP	Total Factor Productivity
UNCTAD	United Nations Conference for Trade and Development
UNCTC	United Nations Centre on Transnational Corporations
UNESCO	United Nations Education Science and Culture Organization
UNIDO	United Nations Industrial Development Organization
UNIFEM	United Nations Development Fund for Women

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Table A 5.1 **System Characteristics for Group 1**

	Indicator	Chile	Panama	Venezuela	Argentina	Means
1.1.1	Women's economic activity rate (15 +)	36%	39%	11%	29%	29%
1.1.7	Women's participation rate in the tertiary sector	81%	81%	79%	79%	80%
1.2.1	Women's employment rate	95%	77%	102%	76%	88%
1.2.5	Women's employment rate in tertiary sector	79%	86%	82%	82%	82%
1.2.7	Women's employment rate in services	59%	64%	61%	67%	63%
1.3.1	Women's self employment rate	10%	7%	12%	21%	12%
1.5.1	Women's participation rate in professional & technical positions	14%	20%	24%	7%	16%
1.5.3	Women's participation rate in administrative & managerial positions	2%	4%	2%	1%	2%
1.5.13	Women's participation rate as sales workers	17%	12%	15%	14%	15%
1.5.15	Women's participation rate as service workers	29%	31%	27%	49%	34%
2.1.1	Participation rate of women in manufacturing	13%	9%	14%	16%	13%
2.1.3	Participation rate of women in manufacturing employment	12%	8%	12%	17%	13%
2.1.11	Women in manufacturing employment	22%	30%	23%	26%	25%
3.1.2	Share of the agricultural sector in GDP	8%	11%	5%	6%	8%
3.1.4	Share of MVA in GDP	19%	8%	18%	22%	17%
3.1.9	GDP per capita	$3,136.31	$2,390.84	$3,711.87	$4,673.75	$3,476.19
3.2.2	Share of manufactured goods in total exports	13%	17%	7%	28%	16%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	33%	55%	22%	32%	35%
3.2.4	Share of sub-sector 38 in total MVA	9%	7%	7%	18%	10%
4.1.4	Total fertility (births per woman)	2.7	2.9	3.6	2.8	3.00
4.2.2	Female primary enrolment rate	147%	124%	135%	159%	141%
4.2.4	Female secondary enrolment ratio	61%	75%	40%	70%	61%
4.2.6	Female tertiary enrolment ratio	2%	26%	11%	2%	10%
4.2.12	Primary school achievement index	86%	83%	70%	90%	82%
5.1.1	Parliamentary representation	6%	8%	10%	5%	7%
6.1.3	Ratification of ILO Convention 111 *	1	2	1	2	1.50
6.1.4	Ratification of ILO Convention 156 *	0	0	1	1	0.50
	Disparity Indicator (- is in favour of men; + in favour of women)					
1.1.2	Index in EAP (15+)	-0.53	-0.45	-0.72	-0.61	-0.58
1.1.8	Index EAP part. rate in the tertiary sector	-0.39	-0.26	-0.42	-0.34	-0.35
1.2.2	Index in employment rate	-0.54	-0.58	-0.55	-0.73	-0.60
2.1.2	Index in part. rate in manufacturing	-0.64	-0.52	-0.62	-0.72	-0.63
2.1.4	Index in part. rate in manuf. employment	-0.72	-0.57	-0.70	-0.65	-0.66

* Dummy variable, scale 0 - 2

Table A 5.2 **System Characteristics of Cluster 2**

	Indicator	Colombia	Paraguay	Ecuador	Peru	Costa Rica	Uruguay	Means
1.1.1	Women's economic activity rate (15 +)	30%	51%	33%	44%	35%	47%	40%
1.1.7	Women's participation rate in the tertiary sector	74%	63%	69%	62%	76%	74%	70%
1.2.1	Women's employment rate	87%	96%	94%	93%	95%	88%	92%
1.2.5	Women's employment rate in tertiary sector	74%	80%	81%	87%	69%	78%	78%
1.2.7	Women's employment rate in services	52%	60%	48%	42%	62%	67%	55%
1.3.1	Women's self employment rate	17%	19%	24%	26%	7%	11%	17%
1.5.1	Women's participation rate in professional & technical positions	13%	14%	14%	16%	16%	17%	15%
1.5.3	Women's participation rate in administrative & managerial posit	1%	2%	1%	3%	2%	2%	2%
1.5.13	Women's participation rate as sales workers	20%	19%	17%	31%	14%	14%	19%
1.5.15	Women's participation rate as service workers	30%	34%	21%	20%	29%	30%	27%
2.1.1	Participation rate of women in manufacturing	21%	18%	14%	16%	24%	19%	19%
2.1.3	Participation rate of women in manufacturing employment	28%	15%	11%	25%	22%	18%	20%
2.1.11	Women in manufacturing employment	39%	36%	28%	30%	34%	35%	34%
3.1.2	Share of the agricultural sector in GDP	16%	24%	13%	6%	16%	11%	14%
3.1.4	Share of MVA in GDP	20%	17%	22%	26%	17%	22%	21%
3.1.9	GDP per capita	$1,299.73	$1,426.09	$1,180.70	1.875.41	$2,106.09	$3,643.80	$1,921.97
3.2.2	Share of manufactured goods in total exports	33%	11%	2%	18%	24%	40%	22%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	46%	57%	31%	42%	55%	48%	46%
3.2.4	Share of sub-sector 38 in total MVA	9%	6%	3%	10%	9%	14%	8%
4.1.4	Total fertility (births per woman)	2.7	4.6	3.5	3.3	3.1	2.3	3.25
4.2.2	Female primary enrolment rate	111%	81%	100%	88%	90%	135%	101%
4.2.4	Female secondary enrolment ratio	79%	38%	70%	58%	47%	64%	59%
4.2.6	Female tertiary enrolment ratio	7%	4%	7%	2%	6%	13%	6%
4.2.12	Primary school achievement index	73%	76%	84%	78%	81%	90%	80%
5.1.1	Parliamentary representation	4%	3%	5%	6%	12%	6%	6%
6.1.3	Ratification of ILO Convention 111 *	2	0	2	0	2	0	1
6.1.4	Ratification of ILO Convention 156 *	0	0	0	1	0	1	0
	Disparity Indicator (- is in favour of men; + in favour of women)							
1.1.2	Index in EAP (15+)	-0.03	-0.24	-0.58	-0.35	-0.54	-0.25	-0.33
1.1.8	Index EAP part. rate in the tertiary sector	-0.35	-0.27	-0.53	-0.44	-0.46	-0.34	-0.40
1.2.2	Index in employment rate	-0.28	-0.23	-0.41	-0.39	-0.58	-0.30	-0.37
2.1.2	Index in part. rate in manufacturing	-0.28	-0.26	-0.51	-0.51	-0.39	-0.36	-0.38
2.1.4	Index in part. rate in manuf. employment	-0.35	-0.44	-0.61	-0.57	-0.49	-0.45	-0.49

* Dummy variable, scale 0 - 2

Table A 5.3

System Characteristics of Cluster 3

	Indicator	El Salvador	Honduras	Guatemala	Means
1.1.1	Women's economic activity rate (15 +)	52%	33%	28%	38%
1.1.7	Women's participation rate in the tertiary sector	77%	63%	71%	70%
1.2.1	Women's employment rate	93%	97%	97%	96%
1.2.5	Women's employment rate in tertiary sector	63%	69%	77%	69%
1.2.7	Women's employment rate in services	52%	54%	52%	52%
1.3.1	Women's self employment rate	26%	25%	17%	23%
1.5.1	Women's participation rate in professional & technical positions	9%	14%	1%	8%
1.5.3	Women's participation rate in administrative & managerial positions	1%	2%	3%	2%
1.5.13	Women's participation rate as sales workers	29%	25%	14%	23%
1.5.15	Women's participation rate as service workers	24%	25%	21%	23%
2.1.1	Participation rate of women in manufacturing	22%	21%	22%	22%
2.1.3	Participation rate of women in manufacturing employment	19%	24%	13%	19%
2.1.11	Women in manufacturing employment	34%	46%	25%	35%
3.1.2	Share of the agricultural sector in GDP	9%	19%	26%	18%
3.1.4	Share of MVA in GDP	19%	15%	15%	16%
3.1.9	GDP per capita	$1,085.87	$581.90	$1,071.23	$913.00
3.2.2	Share of manufactured goods in total exports	40%	12%	28%	27%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	52%	50%	43%	48%
3.2.4	Share of sub-sector 38 in total MVA	7%	7%	7%	7%
4.1.4	Total fertility (births per woman)	3.8	4.9	5.1	4.60
4.2.2	Female primary enrolment rate	140%	114%	74%	109%
4.2.4	Female secondary enrolment ratio	15%	33%	22%	24%
4.2.6	Female tertiary enrolment ratio	1%	3%	2%	2%
4.2.12	Primary school achievement index	57%	65%	63%	62%
5.1.1	Parliamentary representation	8%	12%	5%	8%
6.1.3	Ratification of ILO Convention 111 *	0	0	0	0.00
6.1.4	Ratification of ILO Convention 156 *	0	0	0	0.00
	Disparity Indicator (- is in favour of men; + in favour of women)				
1.1.2	Index in EAP (15+)	-0.17	-0.55	-0.65	-0.46
1.1.8	Index EAP part. rate in the tertiary sector	0.04	-0.27	-0.40	-0.21
1.2.2	Index in employment rate	-0.43	-0.55	-0.65	-0.54
2.1.2	Index in part. rate in manufacturing	-0.17	-0.01	-0.25	-0.14
2.1.4	Index in part. rate in manuf. employment	-0.50	0.00	-0.67	-0.39

* Dummy variable, scale 0 - 2

Table A 5.4 **System Characteristics of Cluster 4**

	Indicator	Brazil	Mexico	Trinidad and Tobago	Means
1.1.1	Women's economic activity rate (15 +)	40%	34%	45%	40%
1.1.7	Women's participation rate in the tertiary sector	66%	53%	72%	64%
1.2.1	Women's employment rate	97%	84%	77%	86%
1.2.5	Women's employment rate in tertiary sector	74%	78%	80%	77%
1.2.7	Women's employment rate in services	77%	63%	53%	65%
1.3.1	Women's self employment rate	12%	12%	6%	10%
1.5.1	Women's participation rate in professional & technical positions	13%	17%	17%	16%
1.5.3	Women's participation rate in administrative & managerial positi	2%	2%	2%	2%
1.5.13	Women's participation rate as sales workers	8%	21%	13%	14%
1.5.15	Women's participation rate as service workers	13%	23%	23%	20%
2.1.1	Participation rate of women in manufacturing	12%	17%	11%	13%
2.1.3	Participation rate of women in manufacturing employment	15%	20%	12%	16%
2.1.11	Women in manufacturing employment	27%	31%	37%	32%
3.1.2	Share of the agricultural sector in GDP	10%	7%	2%	6%
3.1.4	Share of MVA in GDP	20%	21%	13%	18%
3.1.9	GDP per capita	$2,618.51	$3,915.60	$4,319.14	$3,617.75
3.2.2	Share of manufactured goods in total exports	55%	64%	29%	49%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	26%	21%	54%	33%
3.2.4	Share of sub-sector 38 in total MVA	23%	22%	42%	29%
4.1.4	Total fertility (births per woman)	2.8	3.2	2.8	2.93
4.2.2	Female primary enrolment rate	111%	106%	105%	107%
4.2.4	Female secondary enrolment ratio	41%	66%	85%	64%
4.2.6	Female tertiary enrolment ratio	3%	3%	8%	4%
4.2.12	Primary school achievement index	51%	75%	84%	70%
5.1.1	Parliamentary representation	6%	8%	14%	9%
6.1.3	Ratification of ILO Convention 111 *	0	2	0	0.67
6.1.4	Ratification of ILO Convention 156 *	0	0	0	0
	Disparity Indicator (- is in favour of men; + in favour of women)				
1.1.2	Index in EAP (15+)	-0.45	-0.56	-0.44	-0.48
1.1.8	Index EAP part. rate in the tertiary sector	-0.28	-0.30	-0.31	-0.30
1.2.2	Index in employment rate	-0.45	-0.55	-0.46	-0.49
2.1.2	Index in part. rate in manufacturing	-0.61	-0.47	-0.46	-0.51
2.1.4	Index in part. rate in manuf. employment	-0.63	-0.55	-0.42	-0.53

* Dummy variable, scale 0 - 2

Table A 5.5 **System Characteristics of Cluster 5**

	Indicator	Barbados	Jamaica	Means
1.1.1	Women's economic activity rate (15 +)	59%	63%	61%
1.1.7	Women's participation rate in the tertiary sector	73%	73%	73%
1.2.1	Women's employment rate	74%	77%	76%
1.2.5	Women's employment rate in tertiary sector	73%	73%	73%
1.2.7	Women's employment rate in services	66%	62%	64%
1.3.1	Women's self employment rate	4%	12%	8%
1.5.1	Women's participation rate in professional & technical positions	10%	11%	11%
1.5.3	Women's participation rate in administrative & managerial positions	3%	2%	3%
1.5.13	Women's participation rate as sales workers	12%	23%	18%
1.5.15	Women's participation rate as service workers	29%	25%	27%
2.1.1	Participation rate of women in manufacturing	8%	11%	10%
2.1.3	Participation rate of women in manufacturing employment	18%	29%	23%
2.1.11	Women in manufacturing employment	55%	29%	42%
3.1.2	Share of the agricultural sector in GDP	5%	7%	6%
3.1.4	Share of MVA in GDP	6%	21%	13%
3.1.9	GDP per capita	$6,419.50	$1,286.92	$3,853.21
3.2.2	Share of manufactured goods in total exports	59%	65%	62%
3.2.3	Share of sub-sectors 31 and 32 in total MVA	52%	46%	49%
3.2.4	Share of sub-sector 38 in total MVA	14%	12%	13%
4.1.4	Total fertility (births per woman)	1.80	2.70	2.25
4.2.2	Female primary enrolment rate	127%	127%	127%
4.2.4	Female secondary enrolment ratio	94%	90%	92%
4.2.6	Female tertiary enrolment ratio	128%	97%	112%
4.2.12	Primary school achievement index	88%	89%	88%
5.1.1	Parliamentary representation	4%	12%	8%
6.1.3	Ratification of ILO Convention 111 *	1	1	1
6.1.4	Ratification of ILO Convention 156 *	0	0	0
	Disparity Indicator (- is in favour of men; + in favour of women)			
1.1.2	Index in EAP (15+)	-0.07	-0.15	-0.11
1.1.8	Index EAP part. rate in the tertiary sector	0.00	0.80	0.40
1.2.2	Index in employment rate	-0.13	-0.26	-0.19
2.1.2	Index in part. rate in manufacturing	0.04	-0.47	-0.21
2.1.4	Index in part. rate in manuf. employment	0.21	-0.59	-0.19

* Dummy variable, scale 0 - 2