

Women in Science and Technology: Philippines

18 January 2008



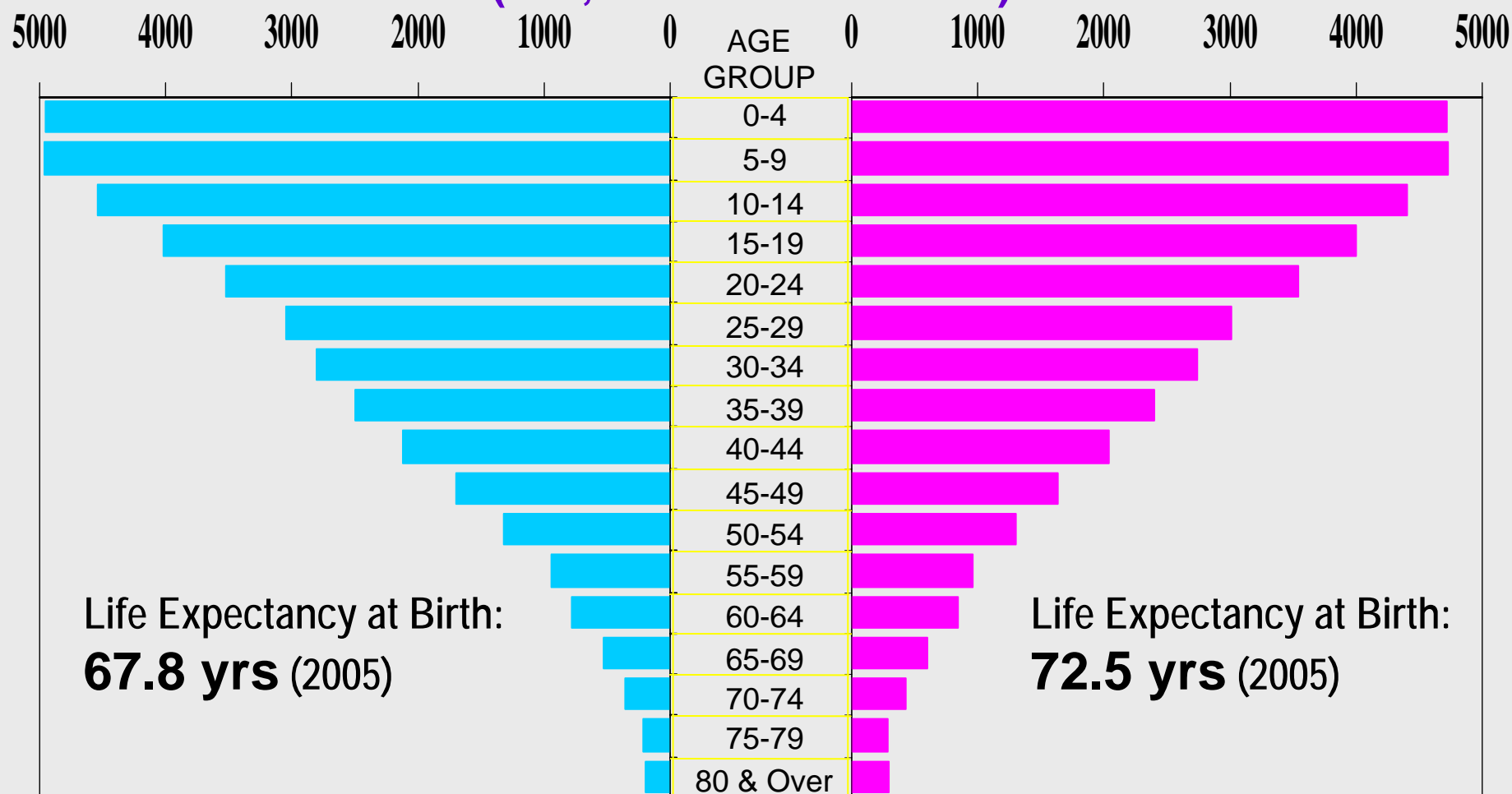
ESTER B. OGENA, Ph.D.

Science Education Institute
Department of Science and Technology
Philippines

**Country Profile –
General Status of Filipino Women**

Status of Filipino Women – Population

Gender-Disaggregated Population Data by Age Group (in 1,000 as of Year 2000)



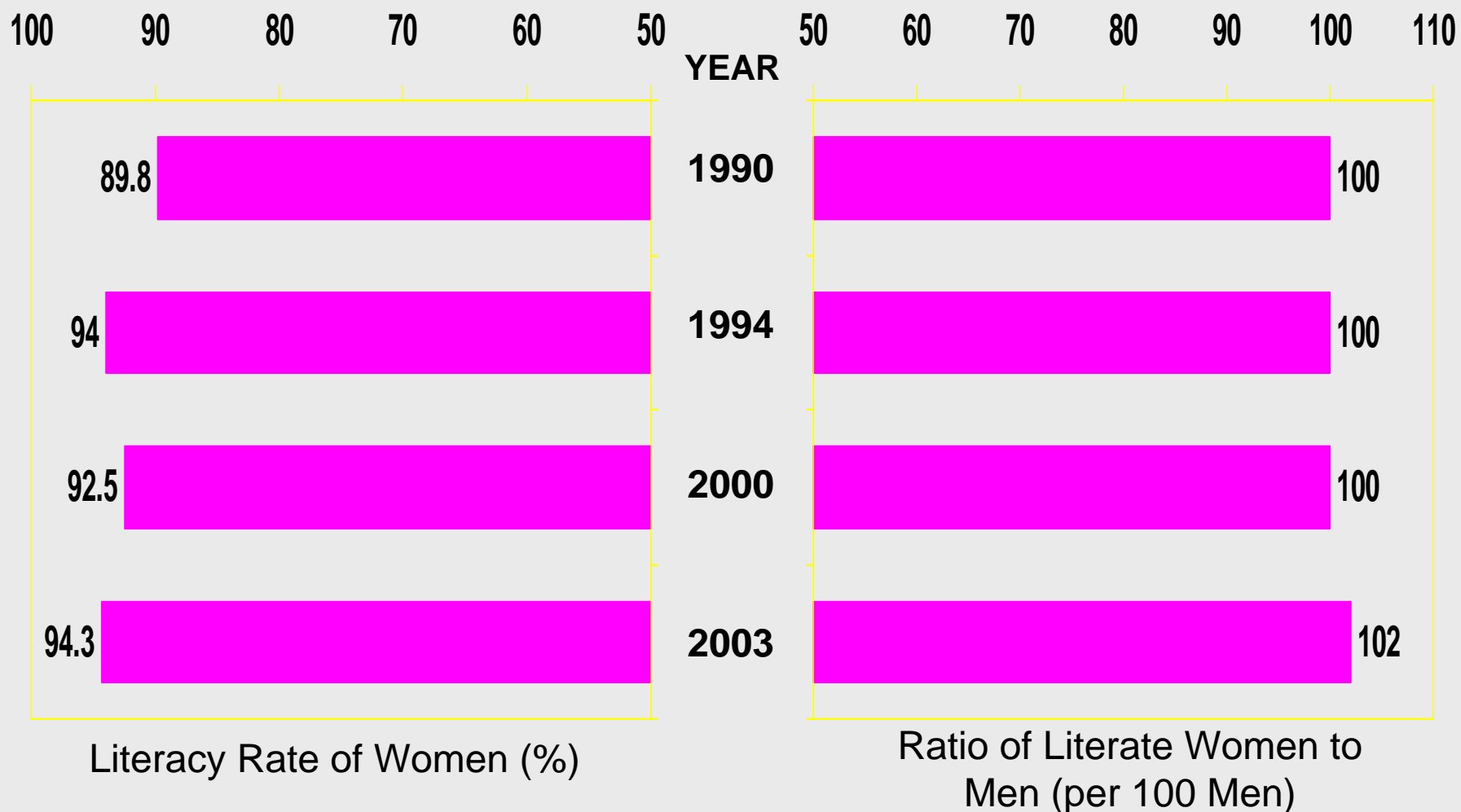
LEGEND: ■ Men ■ Women

SOURCE: 2000 Census of Population and Housing (CPH), National Statistics Office (NSO), <http://www.census.gov.ph>

Status of Filipino Women in EDUCATION

Status of Filipino Women in Education

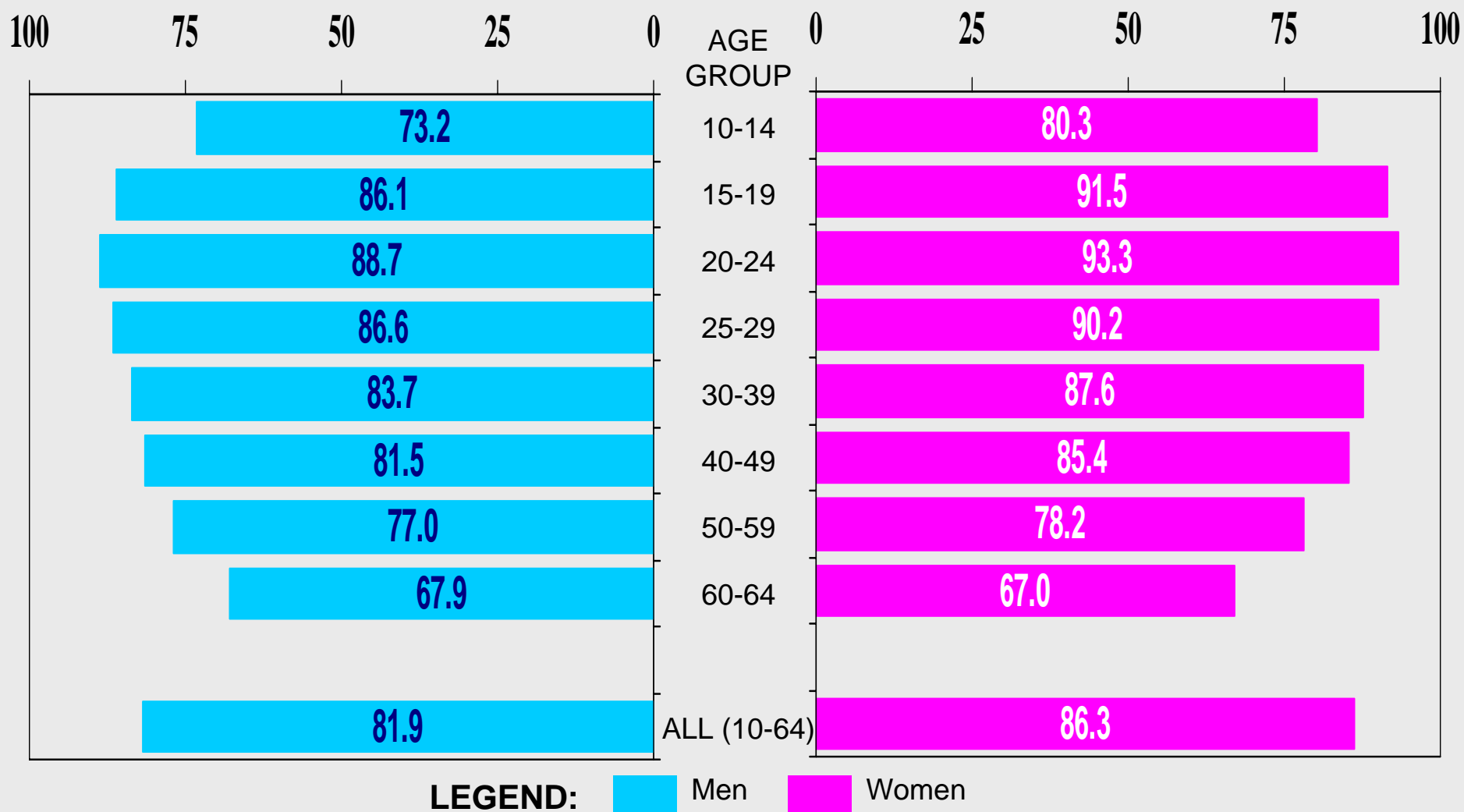
Simple Literacy of Women, 15-24 Years Old, by Year



SOURCE: 2000 FLEMMS (Functional Literacy, Education and Mass Media Survey), NSO, <http://www.census.gov.ph>

Status of Filipino Women in Education

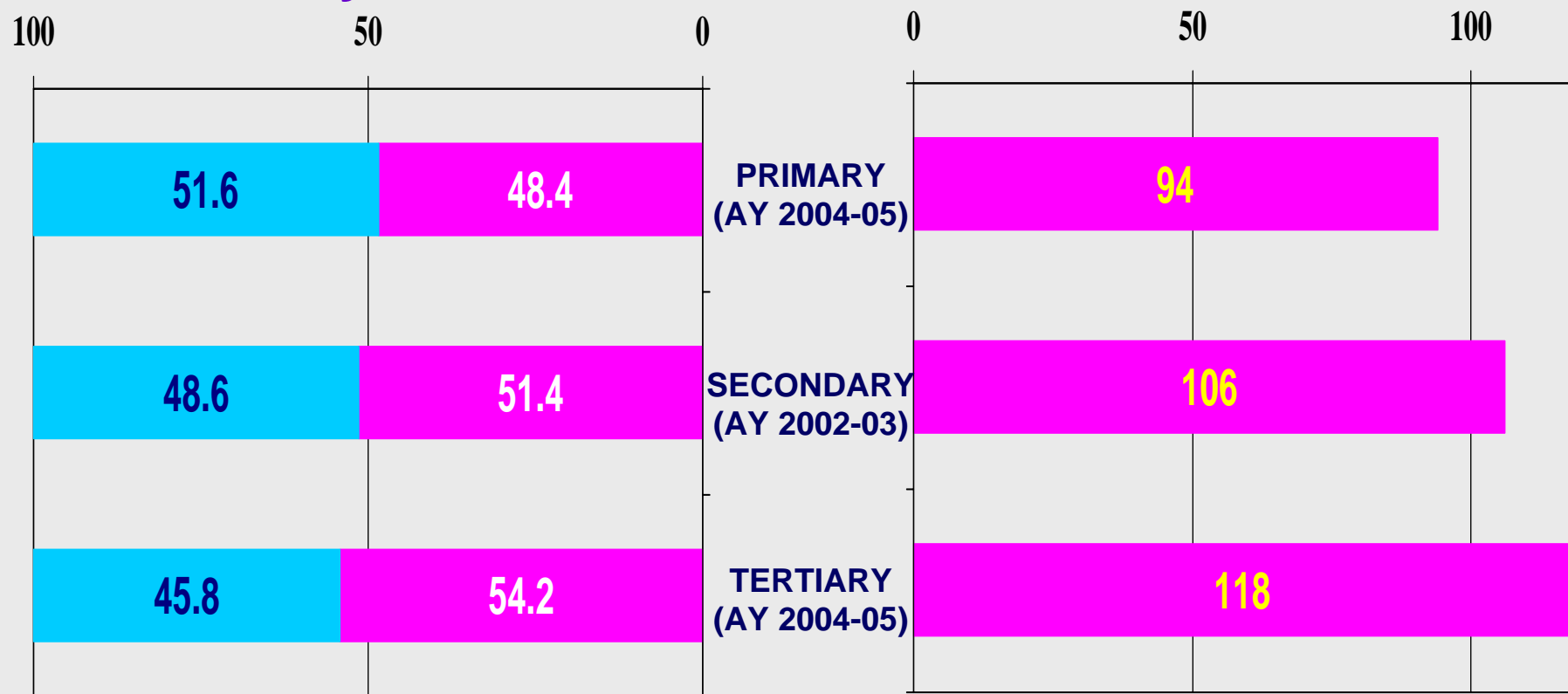
Functional Literacy by Sex, 10-64 Years Old (2003)



SOURCE: 2003 FLEMMS, NSO, <http://www.census.gov.ph>

Status of Filipino Women in Education

Enrolment in Primary, Secondary and Tertiary Education by Sex and Ratio of Females to Males



Percent Enrolment (%)

Number of Females per 100 Males

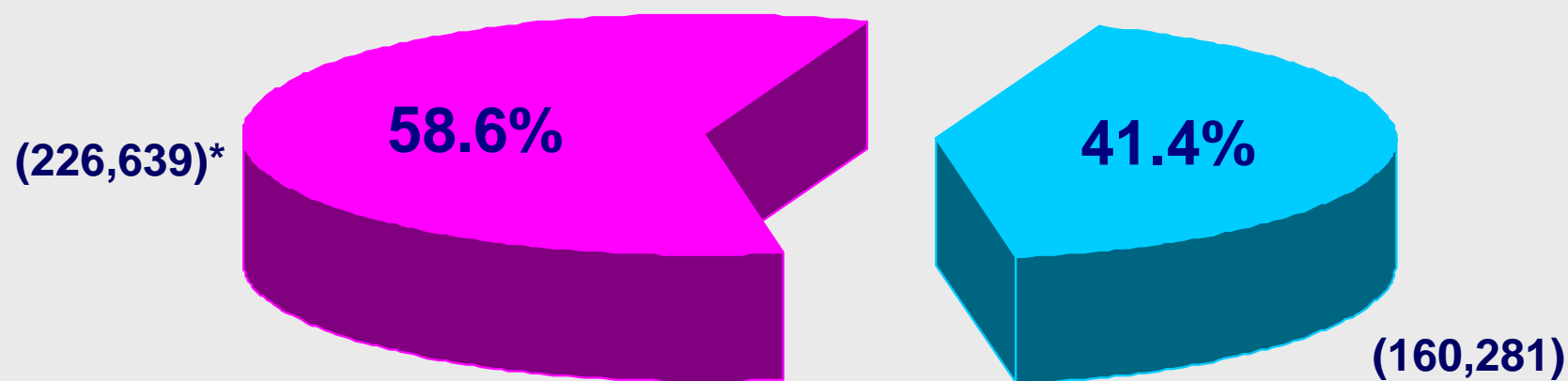
LEGEND:

Women Men

SOURCE: Unpublished Statistical Data from the Department of Education (DepEd) and AY 2004-05 Statistical Bulletin of the Commission on Higher Education (CHED)

Status of Filipino Women in Education

Percentage Distribution of Higher Education Level Graduates by Sex (AY 2003-2004)



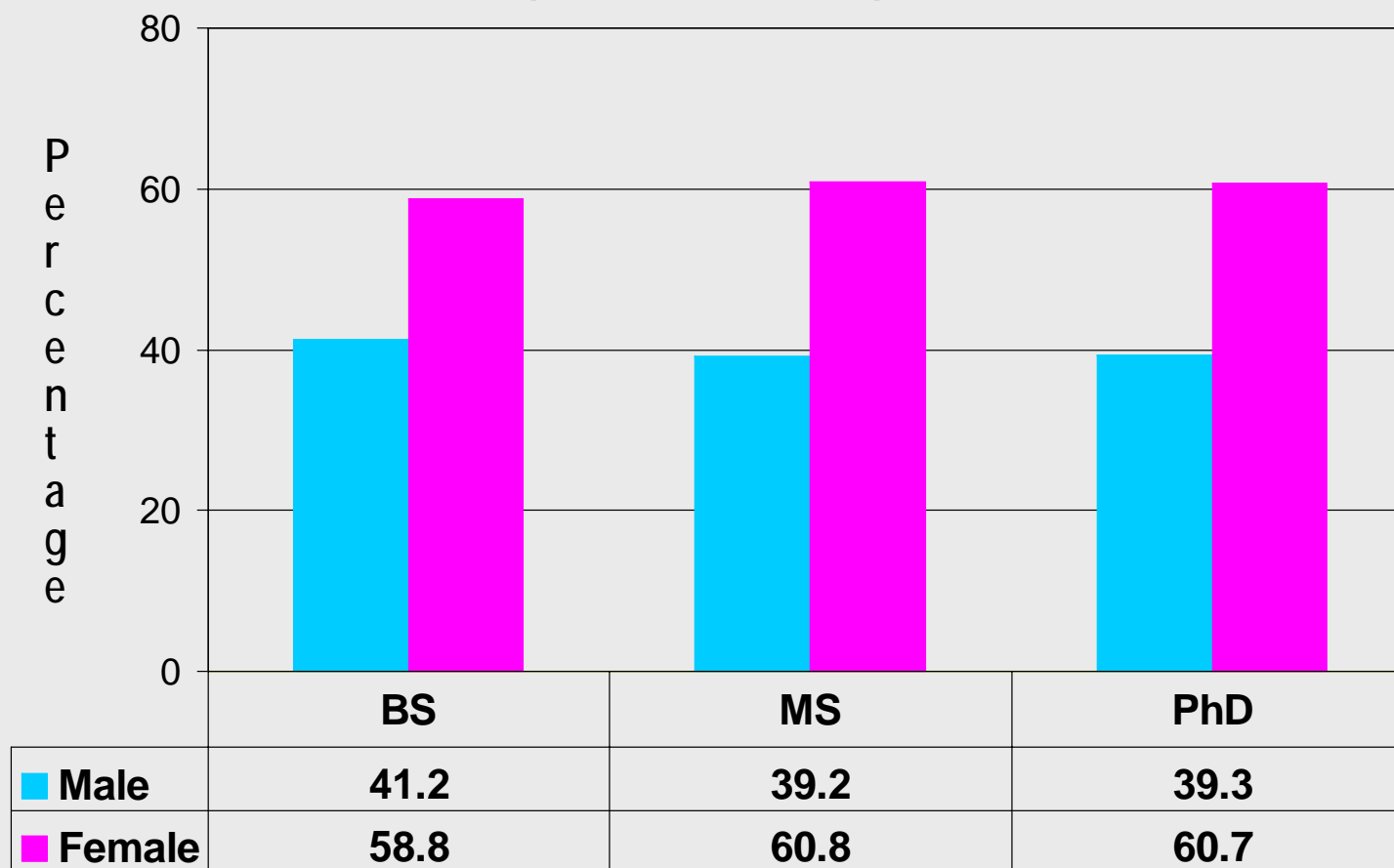
Total Number of Graduates: **386,920**

Female Male

*() – Actual Count

Status of Filipino Women in Education

Percentage Distribution of Graduates by Sex and Degree Program Level (AY 2003-2004)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

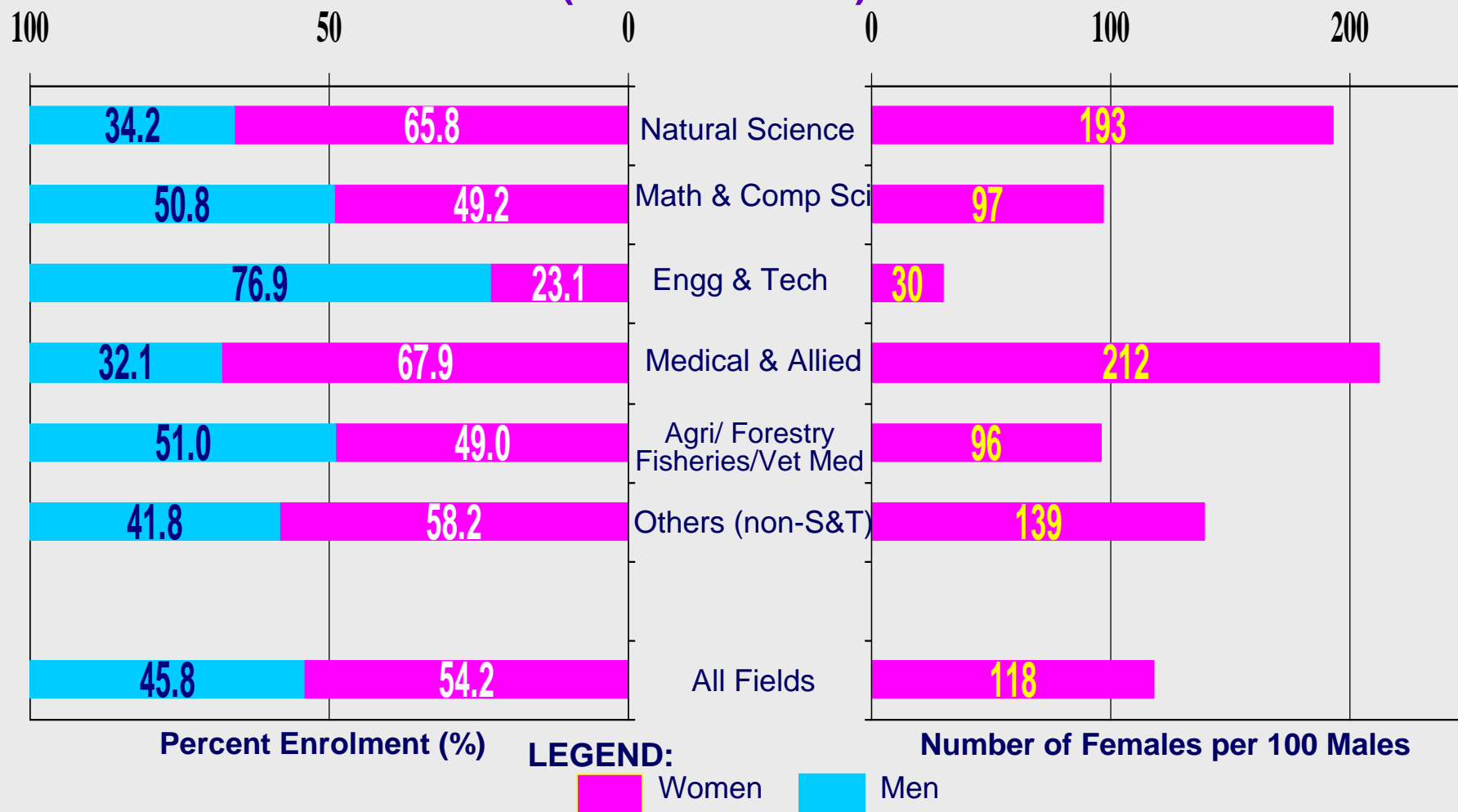
Enrolment in Higher Education by Discipline by Sex (AY 2004-2005)

Discipline	Total	Male	Female	Percent of Women
All Disciplines	2,402,315	1,100,199	1,302,116	54.2
Natural Sciences	23,458	8,011	15,447	65.8
Mathematics & Computer Science	240,178	121,986	118,192	49.2
Engineering & Technology	321,660	247,289	74,371	23.1
Medical & Allied	445,729	142,971	302,758	67.9
Agricultural, Forestry, Fisheries, Vet Med	70,824	36,135	34,689	49.0
Others (Non-S&T)	1,300,466	543,807	756,659	58.2

SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

Enrolment in Higher Education by Discipline by Sex and Ratio of Females to Males (AY 2004-2005)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

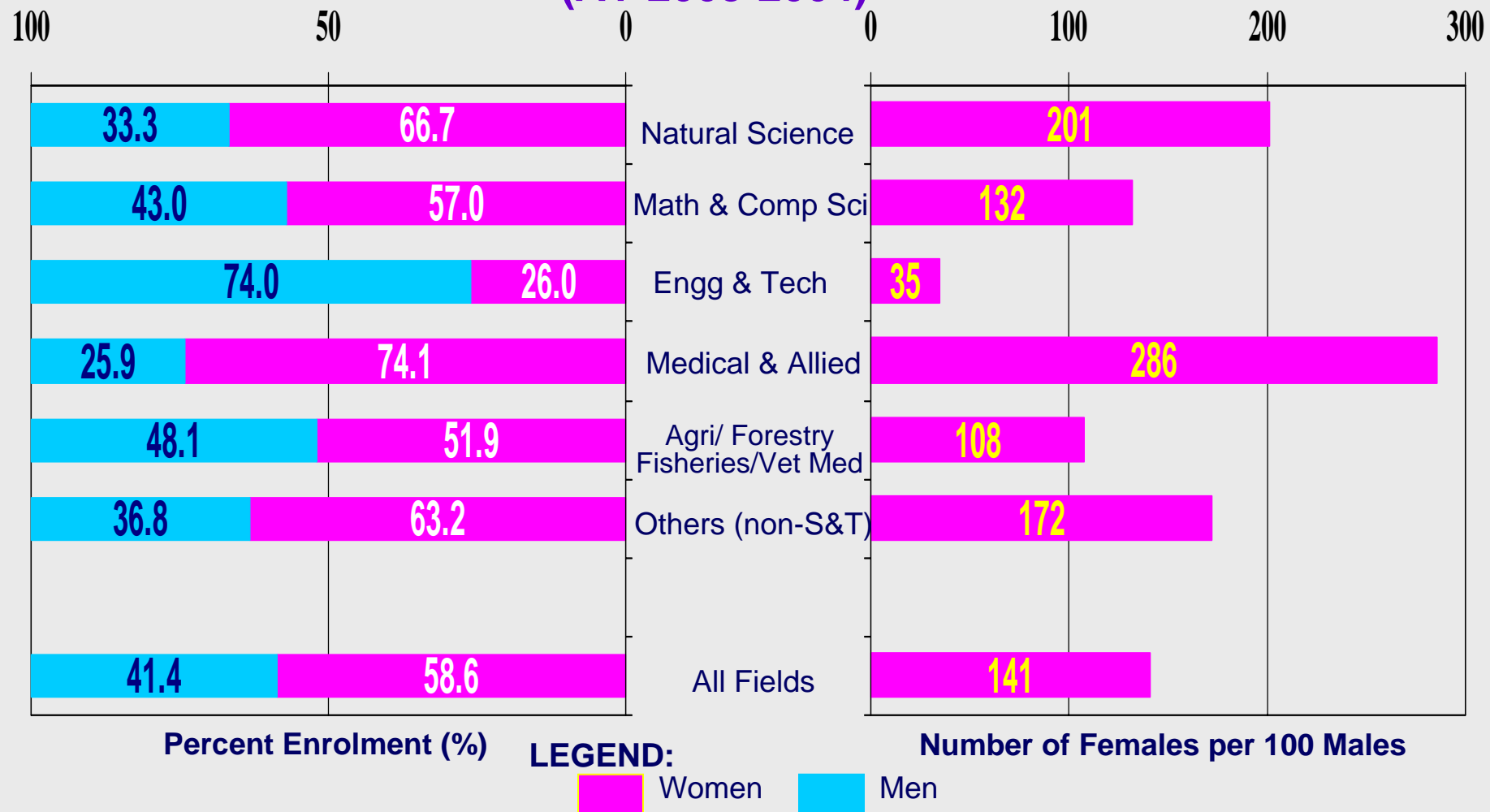
Graduates by Discipline by Sex (AY 2003-2004)

Discipline	Total	Male	Female	Percent of Women
All Disciplines	386,920	160,281	226,639	58.6
Natural Sciences	4,209	1,400	2,809	66.7
Mathematics & Computer Science	35,367	15,224	20,143	57.0
Engineering & Technology	50,679	37,500	13,179	26.0
Medical & Allied	41,688	10,790	30,898	74.1
Agricultural, Forestry, Fisheries, Vet Med	13,154	6,326	6,828	51.9
Others (Non-S&T)	241,823	89,041	152,782	63.2

SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

Graduates in Higher Education by Discipline by Sex and Ratio of Females to Males (AY 2003-2004)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

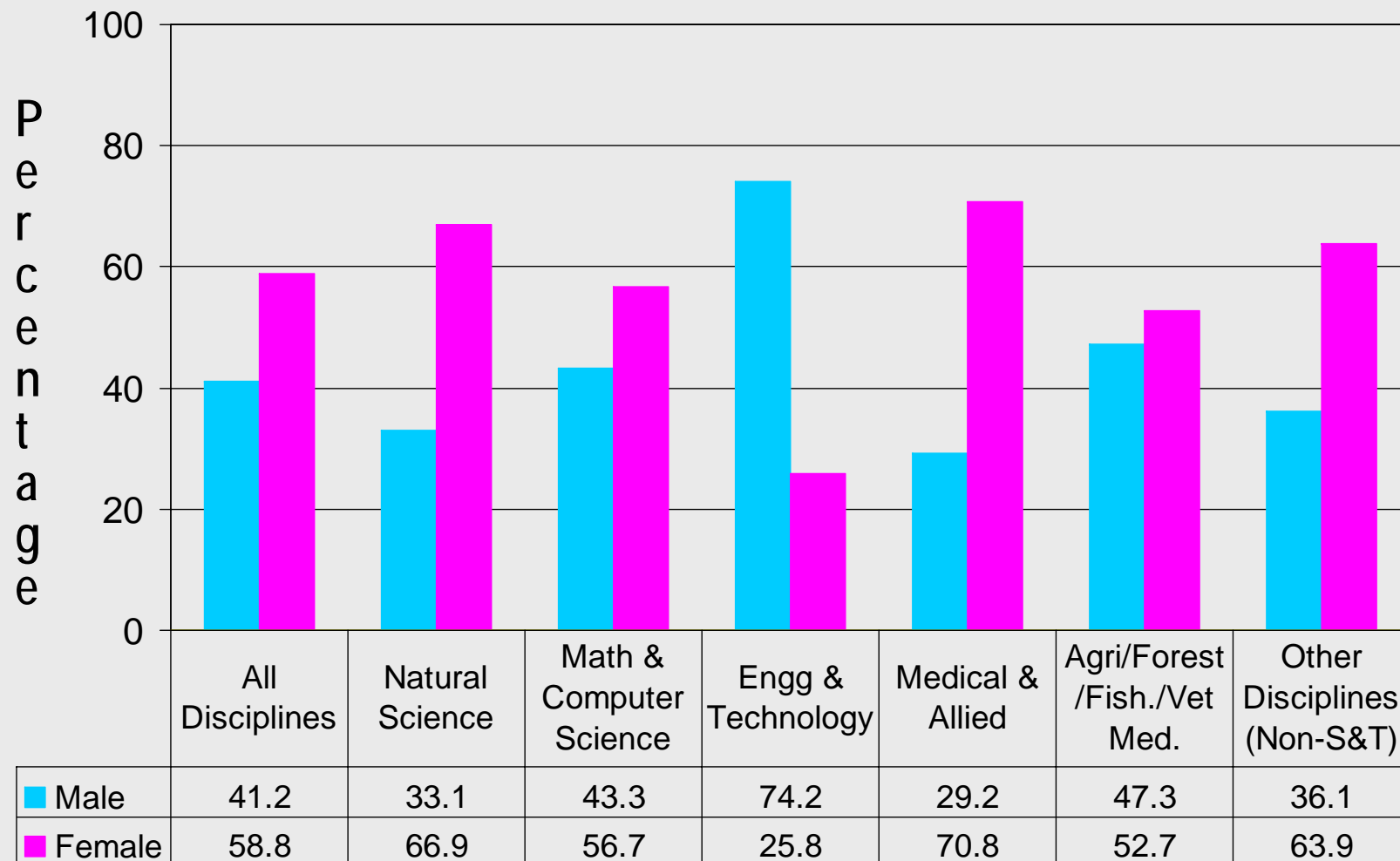
Graduates in Higher Education By Degree Program (AY 2003-2004)

Field of Study	Baccalaureate		Master's		Doctoral	
	Male	Female	Male	Female	Male	Female
All Disciplines	130,190	185,738	5,427	8,416	598	924
Natural Sciences	1,338	2,704	59	94	3	10
Mathematics & Computer Science	10,894	14,278	107	96	3	3
Engineering & Technology	29,388	10,244	215	90	3	3
Medical & Allied	7,709	18,694	176	536	2	2
Agricultural, Forestry, Fisheries, Vet Med	4,854	5,415	125	133	33	30
Others (Non-S&T)	76,007	134,403	4,745	7,467	554	876

SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

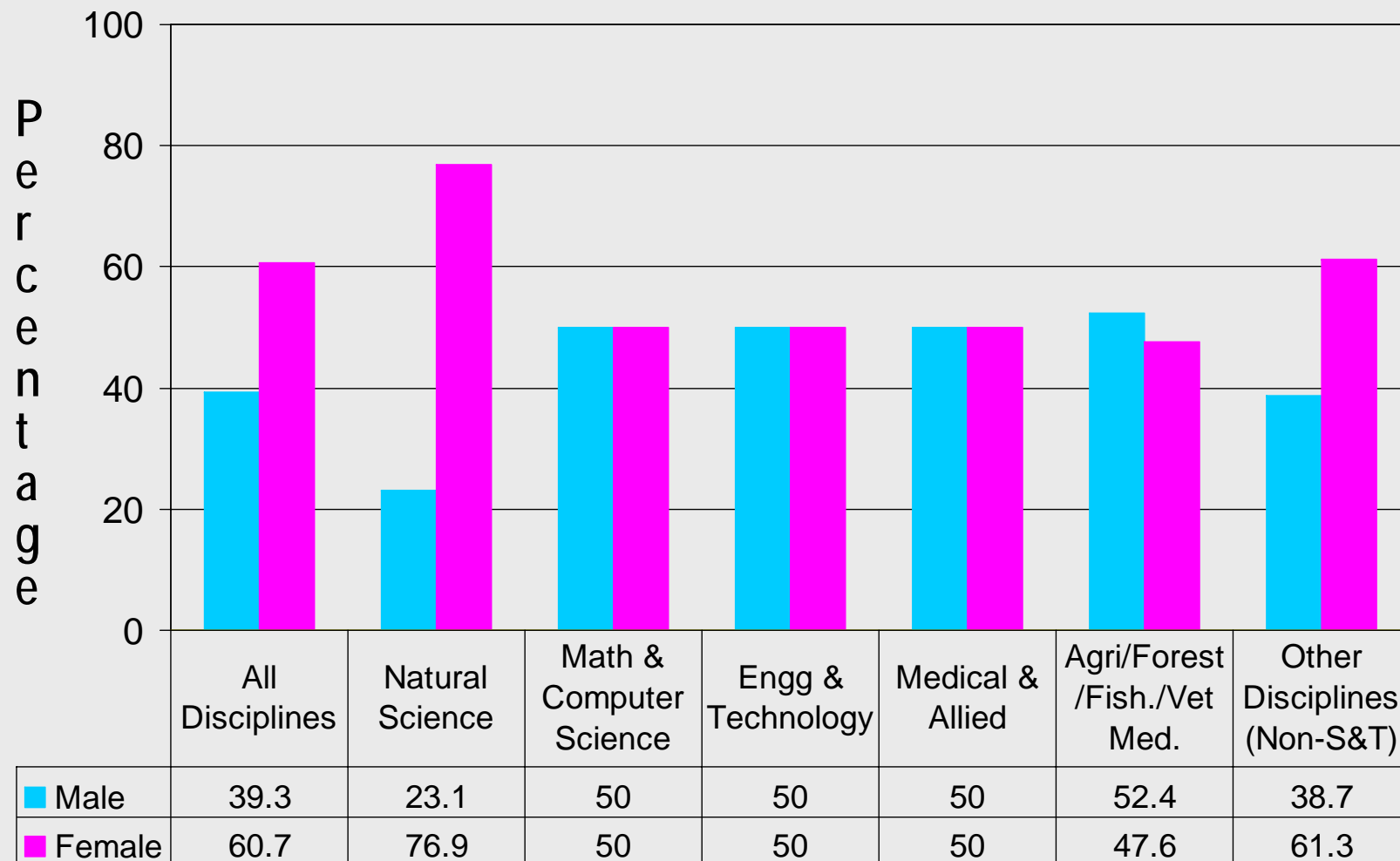
BS Degree Graduates by Discipline by Sex (AY 2003-2004)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

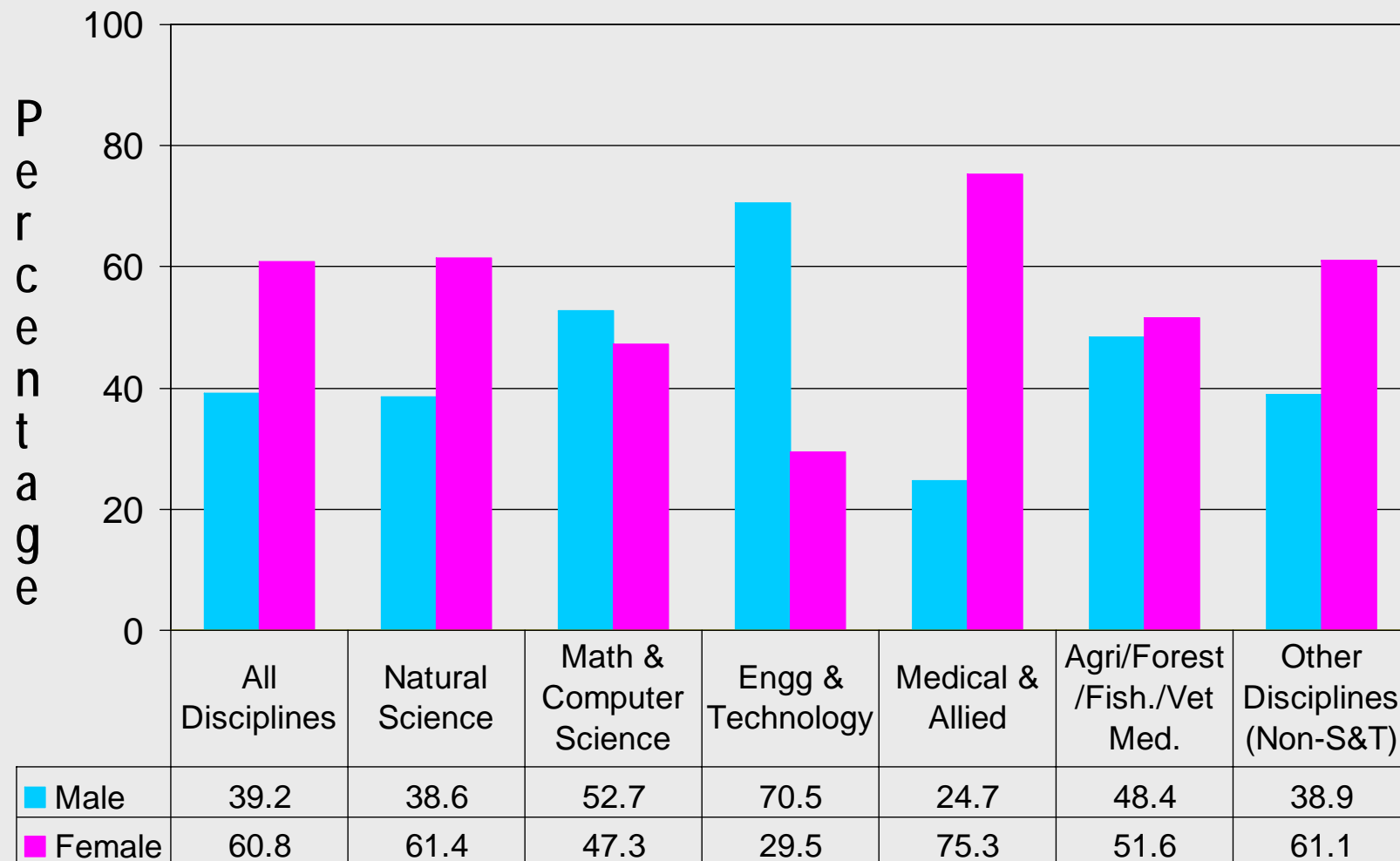
PhD Degree Graduates by Discipline by Sex (AY 2003-2004)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

Status of Filipino Women in S&T Education

MS Degree Graduates by Discipline by Sex (AY 2003-2004)



SOURCE: AY 2004-05 Statistical Bulletin, CHED

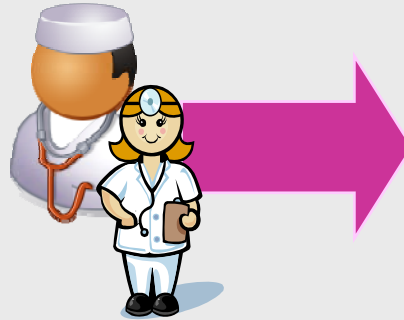
Status of Filipino Women in S&T Education

Graduates in Higher Education By Degree Program (AY 2003-2004)

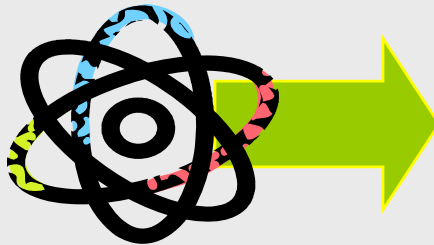
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SOURCE: AY 2004-05 Statistical Bulletin, CHED

Medical and Allied Fields



Comparison of Male-Female Data in Higher Education

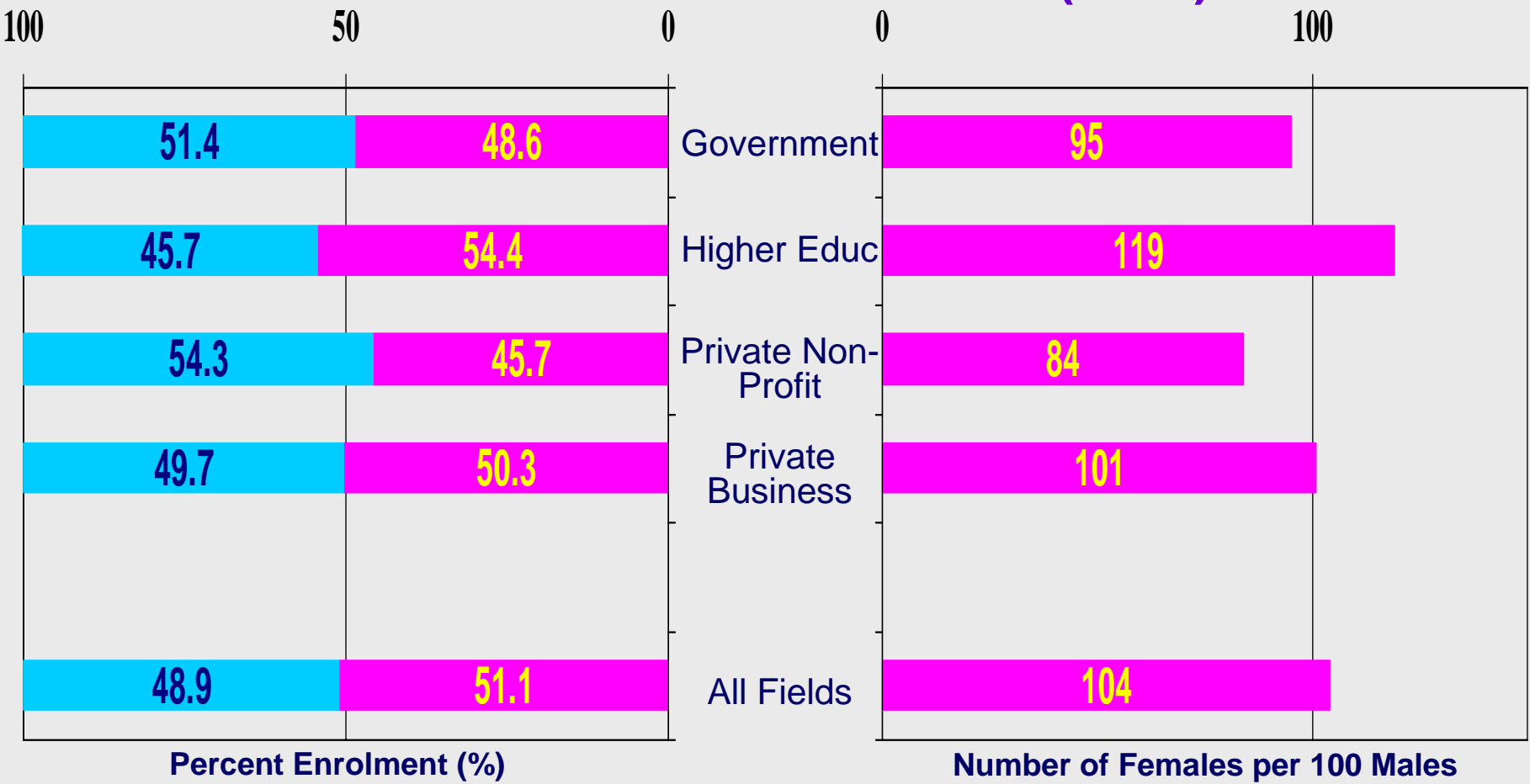


Status of Filipino Women in

**RESEARCH and
DEVELOPMENT**

Status of Filipino Women in R&D

Number of R&D Personnel by Sector by Sex and Ratio of Females to Males (2003)

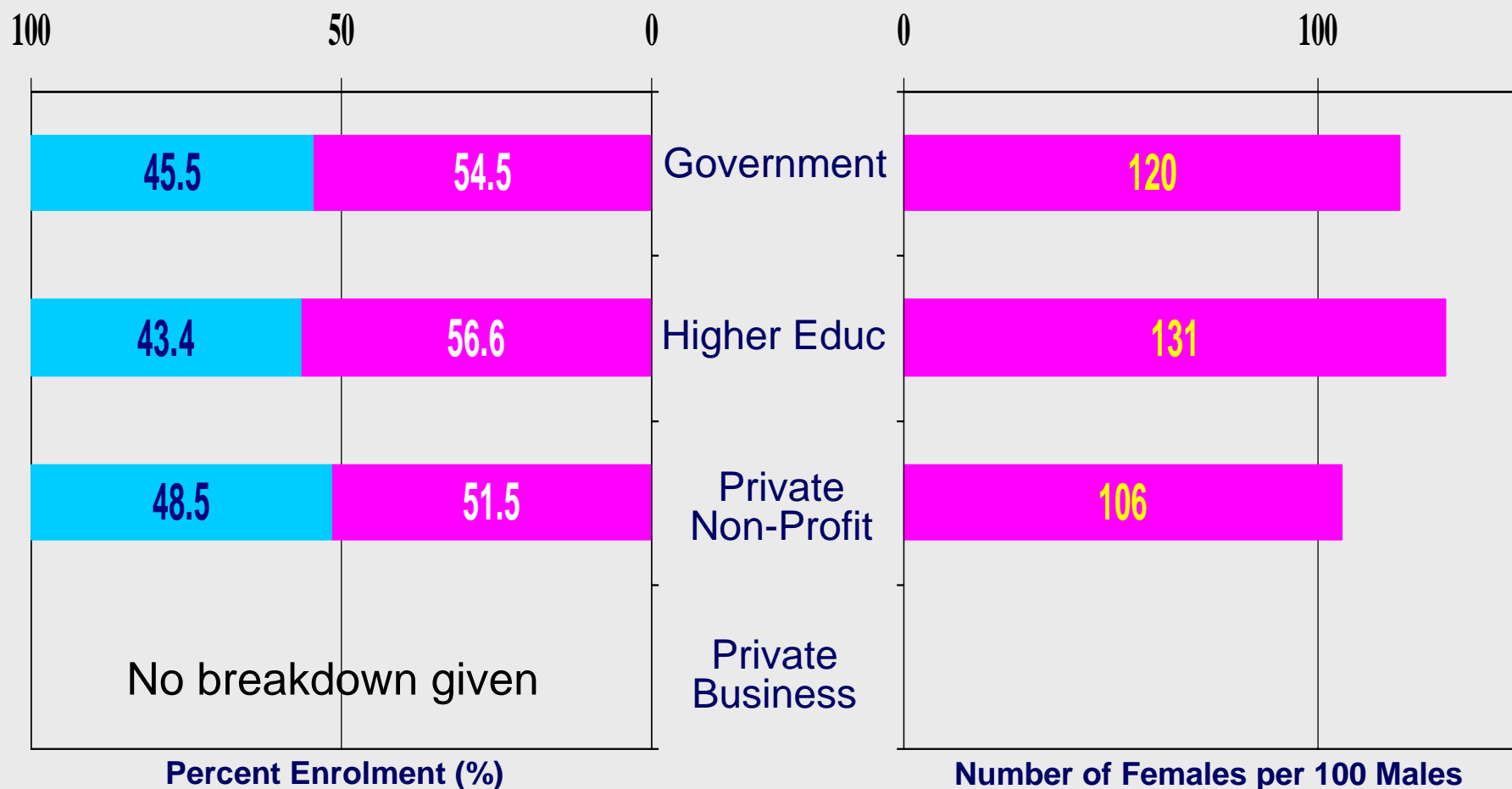


LEGEND:
■ Women ■ Men

SOURCE: 2003 R&D Survey, Department of Science and Technology (DOST)

Status of Filipino Women in R&D in S&T

Number of Scientists and Engineers Engaged in R&D by Sector by Sex and Ratio of Females to Males



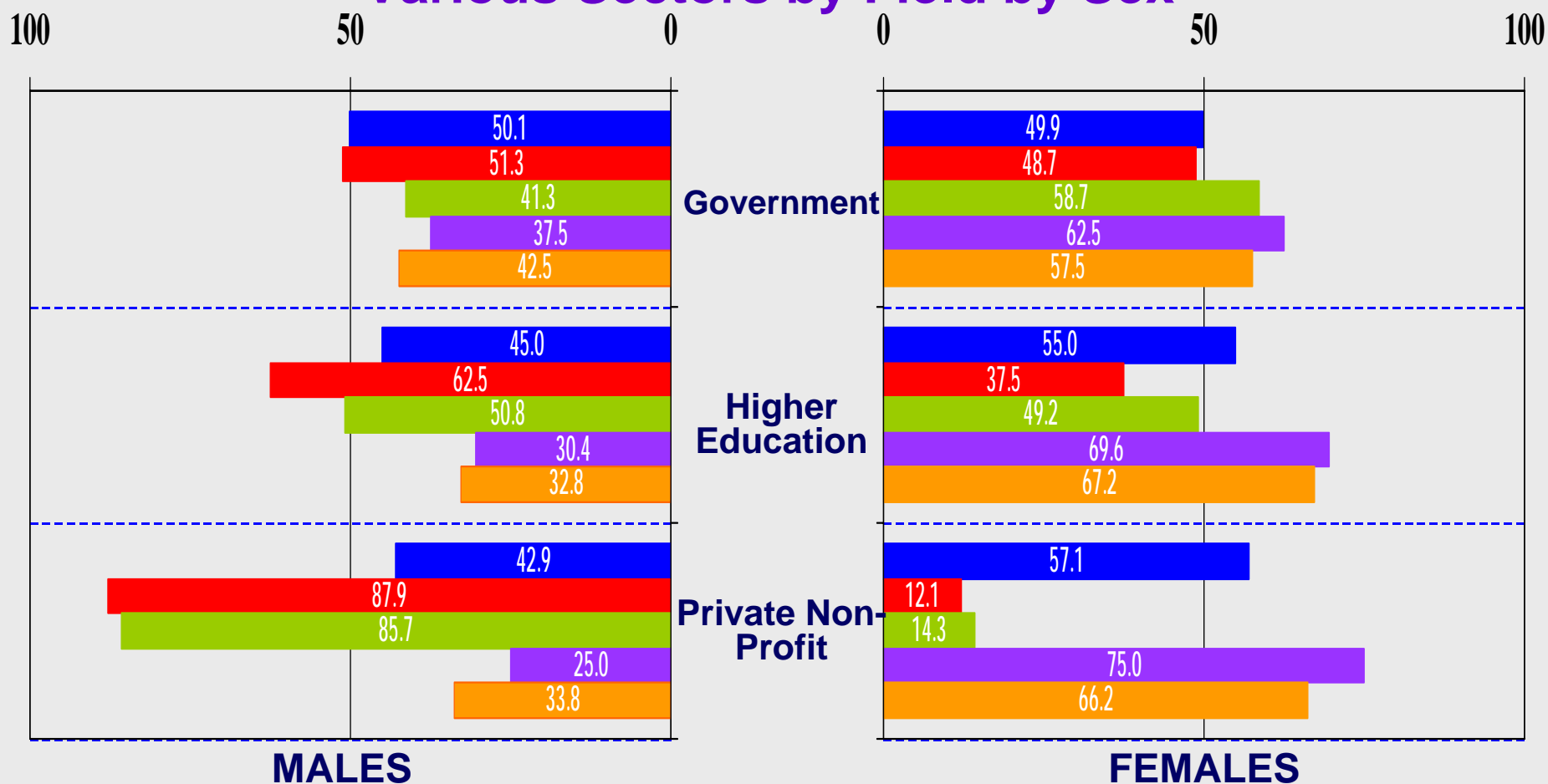
LEGEND:

Women Men

SOURCE: 2003 R&D Survey, Department of Science and Technology (DOST)

Status of Filipino Women in R&D in S&T

Scientists and Engineers Engaged in R&D in the Various Sectors by Field by Sex



LEGEND:



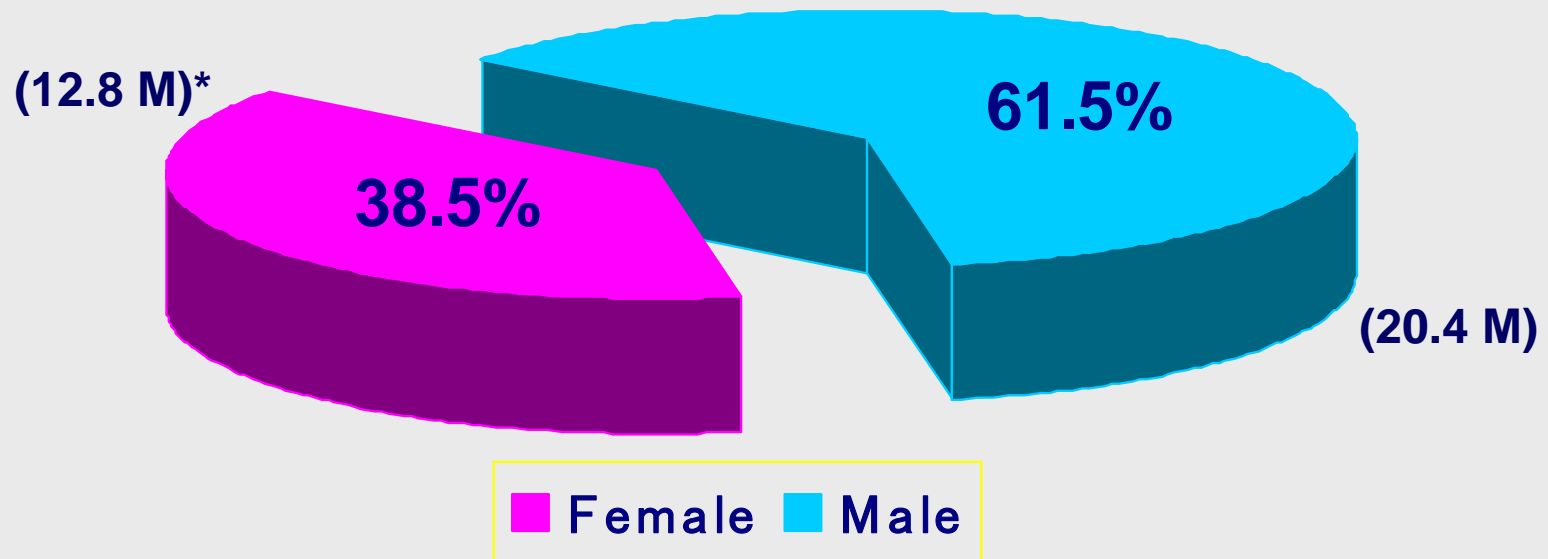
SOURCE: 2003 R&D Survey, Department of Science and Technology (DOST)

Status of Filipino Women in

**ECONOMIC
PARTICIPATION, LABOR
and EMPLOYMENT**

Status of Filipino Women in Economic Participation, Labor and Employment

Employed Persons by Sex, 2006



Total Number of Employed Persons: **33.2 Million**

Status of Filipino Women in Economic Participation, Labor and Employment

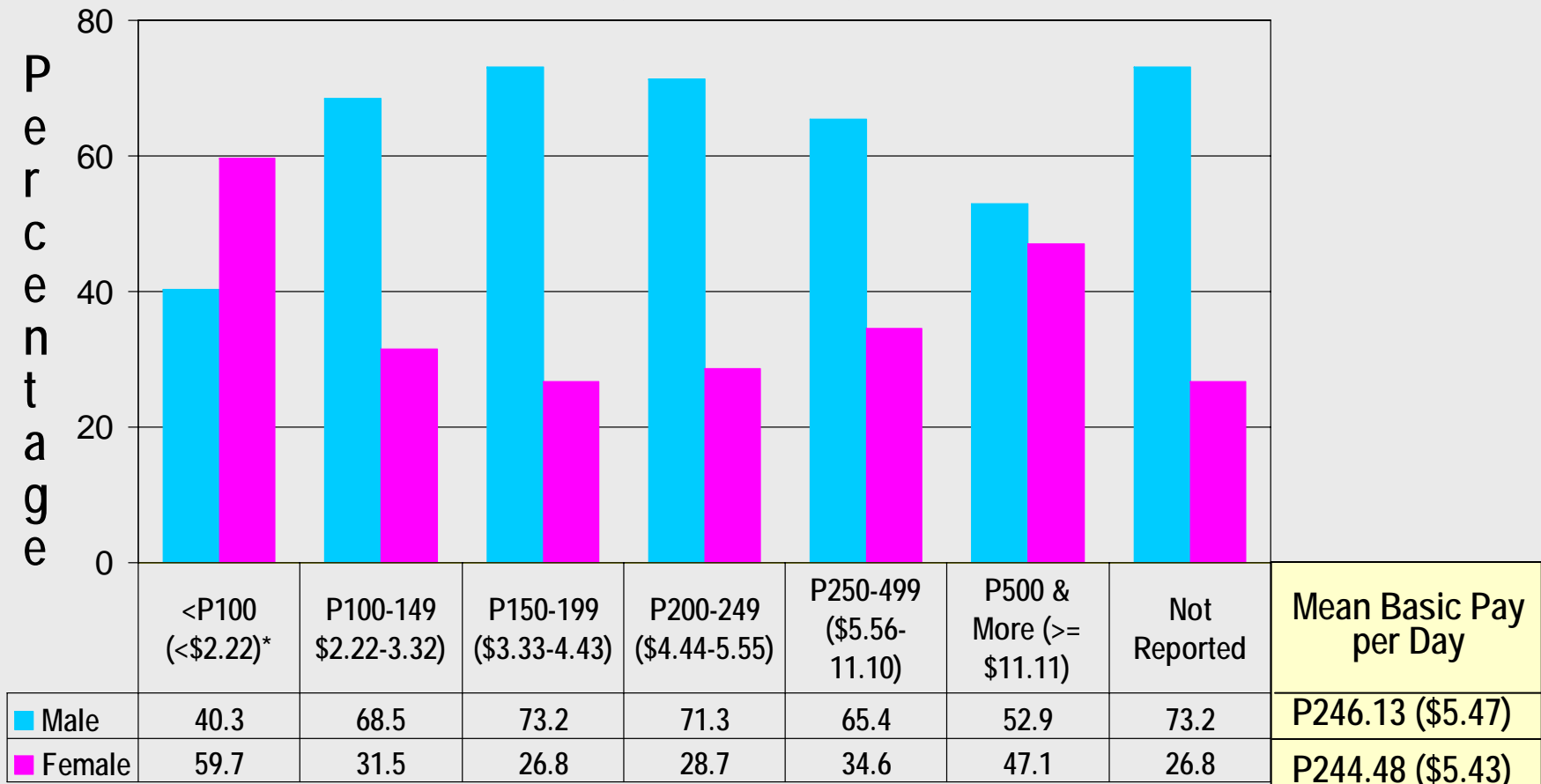
Labor Force Statistics by Sex



SOURCE: 2006 Labor Force Survey, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in Economic Participation, Labor and Employment

Distribution of Wage and Salary Workers by Basic Pay Per Day and Sex

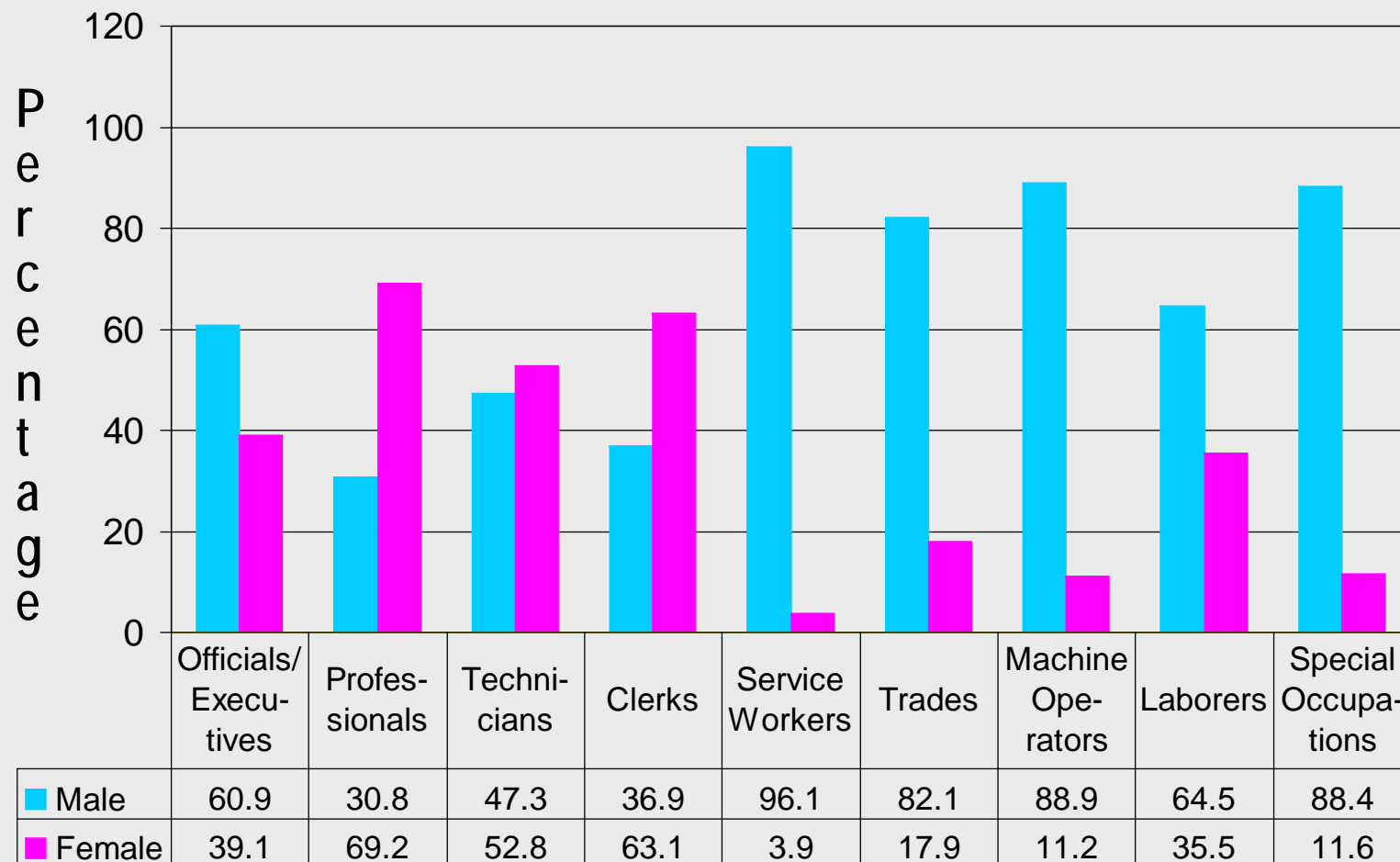


* at P45 per \$1.00

SOURCE: 2004 Labor Force Survey, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in Economic Participation, Labor and Employment

Employed Persons by Primary Occupation by Sex



SOURCE: 2004 Labor Force Survey, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in Economic Participation, Labor and Employment

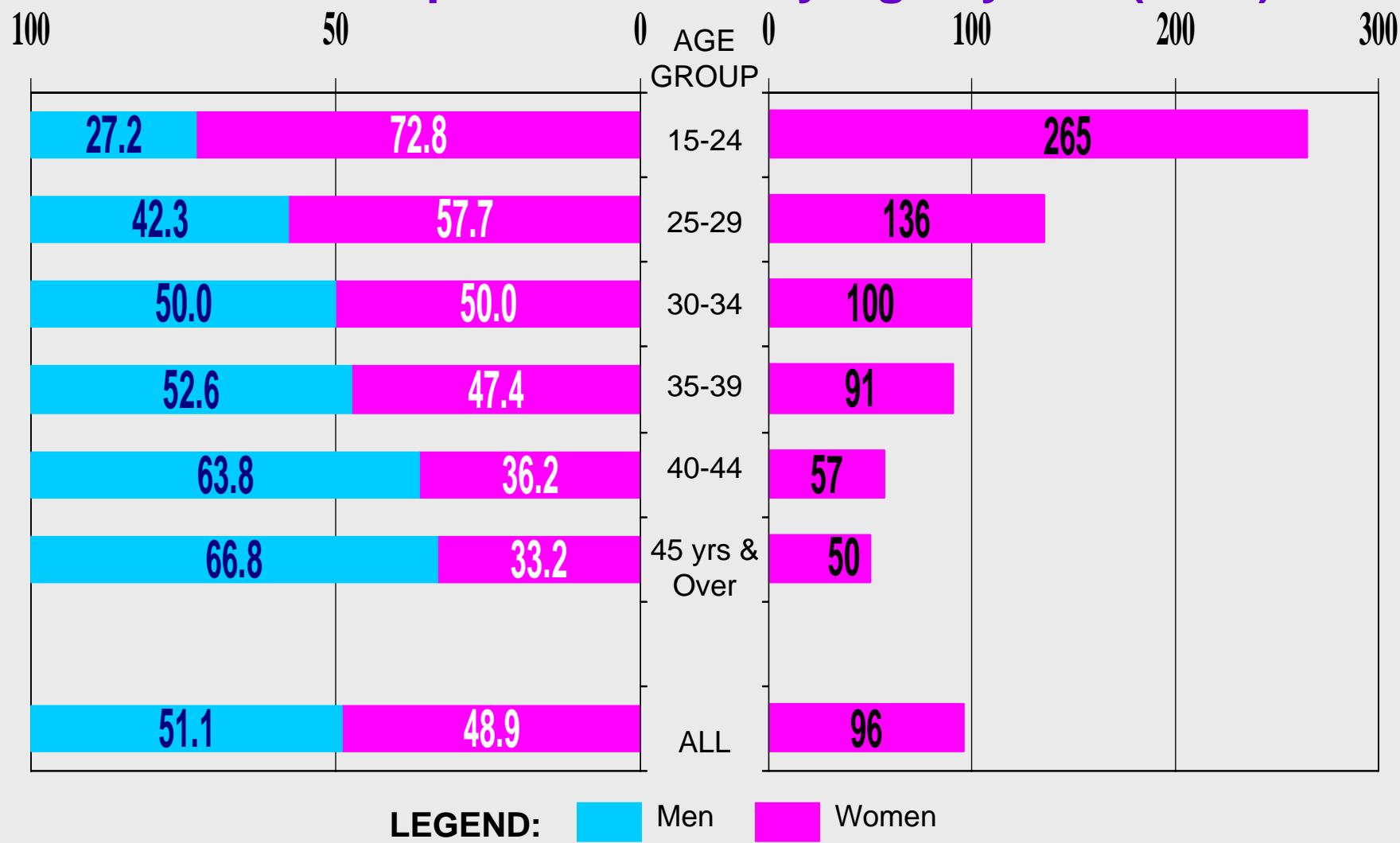
Employed Persons in Industries by Sex



SOURCE: 2004 Labor Force Survey, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in Economic Participation, Labor and Employment

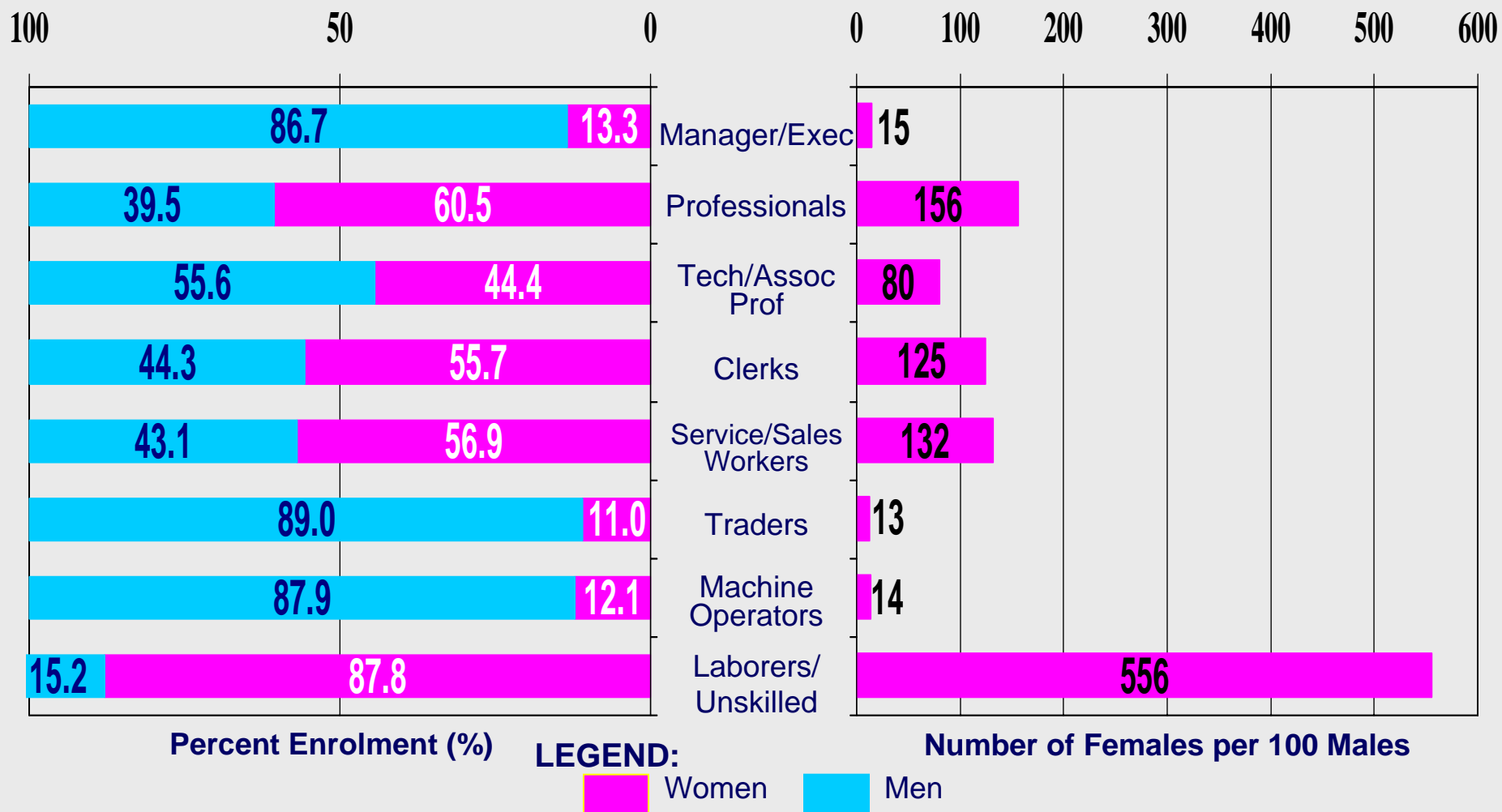
Overseas Filipino Workers by Age by Sex (2004)



SOURCE: 2004 Survey on Overseas Filipinos, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in Economic Participation, Labor and Employment

Overseas Filipino Workers by Age by Sex (2004)

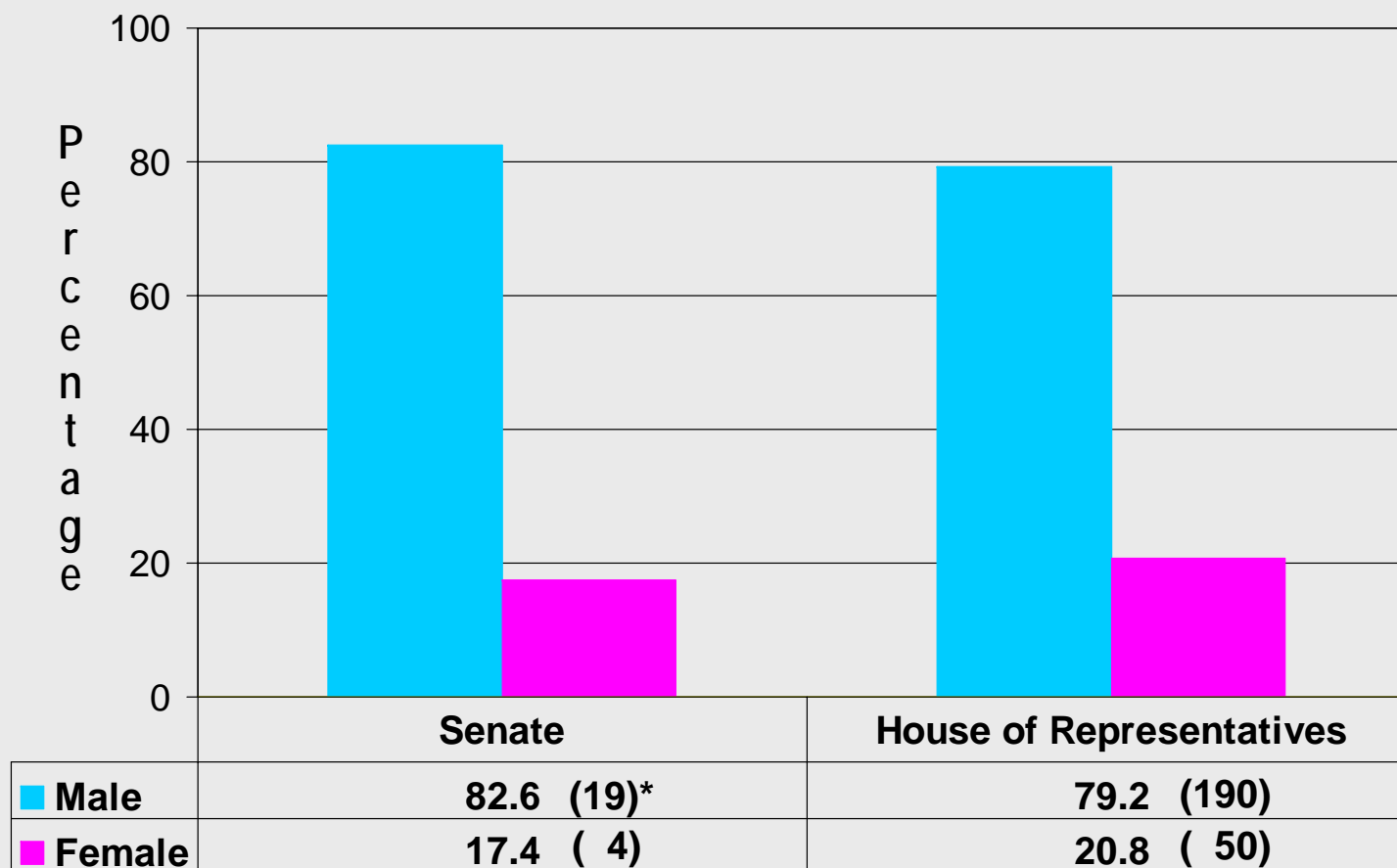


SOURCE: 2004 Survey on Overseas Filipinos, NSO (<http://www.census.gov.ph>)

Status of Filipino Women in DECISION MAKING

Status of Filipino Women in Decision Making

Women in Legislative Bodies (as of November 2007)

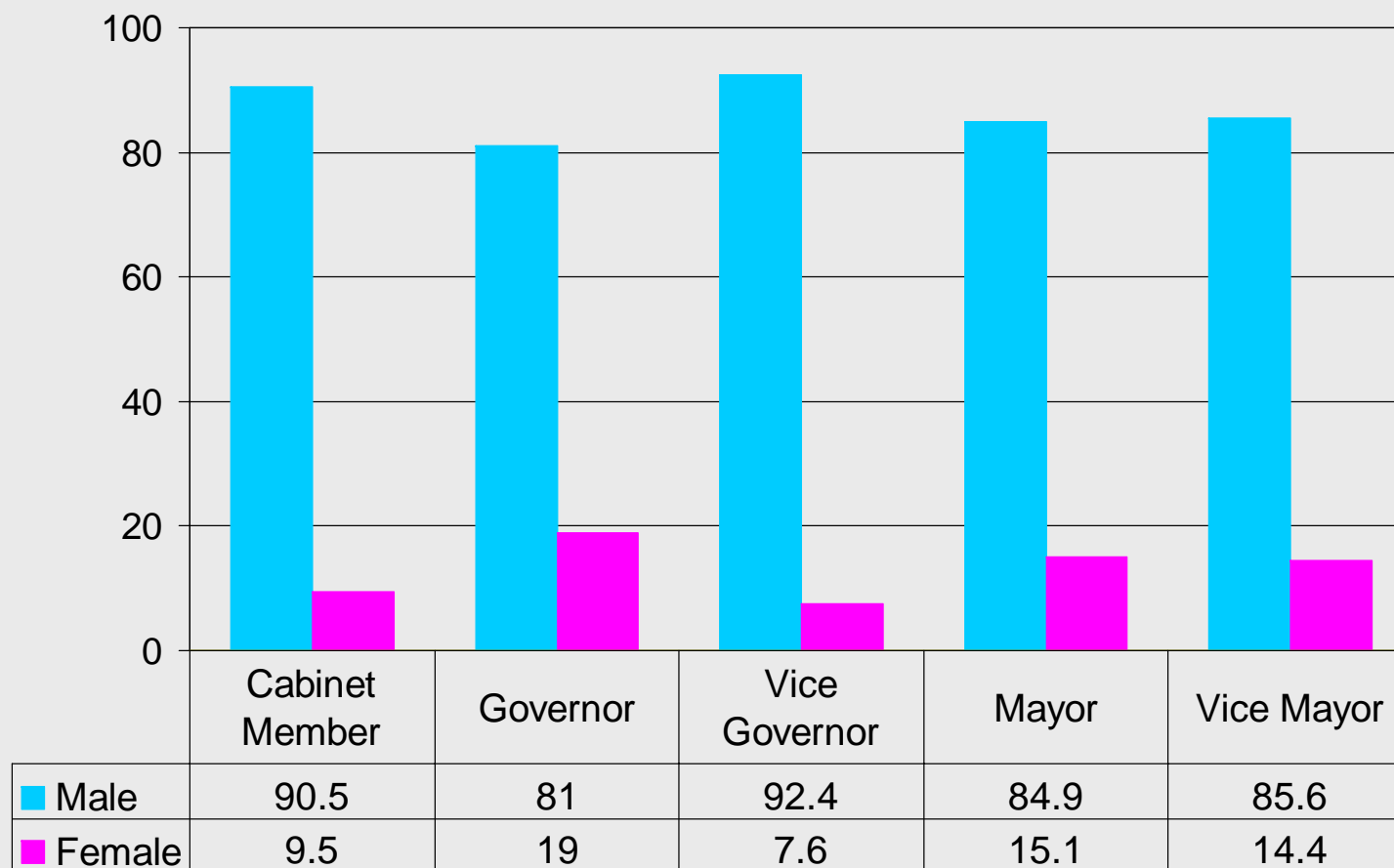


*() – actual count

SOURCE: <http://www.senate.gov.ph> and <http://www.congress.gov.ph>

Status of Filipino Women in Decision Making

Women in Politics and Governance



(Data as of February 2005, except for Cabinet Members, which reflect November 2007 data)

SOURCE: <http://www.gov.ph/directory>

Status of Filipino Women in Decision Making in S&T

Women in the Department of Science and Technology (as of November 2007)

DOST Agencies	Male	Female	Percent of Women
<i>Central Office</i>			
Secretary	0	1	100.0
Undersecretaries	2	1	33.3
Assistant Secretaries	1	2	66.7
<i>Sectoral Planning Councils</i>			
Executive Director	5	0	0.0
<i>R&D Institutes</i>			
Director	4	3	42.9
<i>S&T Service Institutes</i>			
Director	2	4	66.7
<i>Advisory Services</i>			
Director	1	1	50.0
<i>Regional Offices</i>			
Director	9	6	40.0
Total	24	18	42.9

SOURCE: DOST Planning Service, Directory of Officials (2007)

Status of Filipino Women in Comparison with Other Countries

Status of Filipino Women – Global Comparison

International Assessment Based on Human Development Indices

Index	Rank	Value
Human Development Index (HDI)	84 (177)*	0.763**
Gender Development Index (GDI)	36 (136)	0.761
GDI Value (in % of HDI)	-	99.7%
Gender Empowerment Index (GEM)	45 (75)	0.526

*() – number of countries included in the assessment

**Classified Under Medium Human Development (HDI between 0.5 – 0.799)

SOURCE: 2006 Human Development Report, <http://www.hdrstats.undp.org/>

Status of Filipino Women – Global Comparison

International Assessment Based on 2007 Gender Gap Rankings

Index/Sub-Index	Rank*	Value
Over-all Gender Gap Index	6	76.3%
Economic Participation and Opportunity	2	78.9%
Educational Attainment	1	100.0%
Health and Survival	1	98.0%
Political Empowerment	14	28.3%

*ranking based on 115 countries included in the assessment

SOURCE:<http://www.weforum.org/gendergap>

Enabling Mechanisms for the Filipino Women

Status of Filipino Women – Enabling Mechanisms

☛ Government Agencies

- ✓ National Commission on the Role of Filipino Women (NCRFW)
- ✓ Technical Education and Skills Development Authority (TESDA) Women Center

Status of Filipino Women – Enabling Mechanisms

☛ **Academe/School or University-Based Institutes**

- ✓ The Development Institute for Women in Asia – Pacific, Philippine Women’s University
- ✓ Institute of Women’s Studies, St. Scholastica’s College
- ✓ Center for Women’s Studies, UP Diliman
- ✓ Center for Gender and Women Studies, UP Manila
- ✓ Women and Gender Institute, Miriam College
- ✓ Gender and Development Center, Philippine Normal University

Status of Filipino Women – Enabling Mechanisms

☛ Private Sector/NGOs

- ✓ Women Inventor's Association of the Philippines (WIAPI)
- ✓ Women's Association of Scientists in the Philippines (WASP)
- ✓ Women in Science and Technology Development Foundation (WISTDF)
- ✓ Women Studies Association in the Philippines (WSAP)

Status of Filipino Women – Enabling Mechanisms

☛ **Laws and Policies to Empower Women**

- ✓ Philippine Constitution, Article II, Section 14 under Declaration of Principles and State Policies, recognizes the role of women in nation building and ensures the fundamental equality before the law between men and women
- ✓ Republic Act (RA) No. 7192 known as Women in Development and Nation Building Act
- ✓ Philippine Plan for Gender-Responsiveness (1995-2025)

Status of Filipino Women – Enabling Mechanisms

☛ Laws and Policies to Empower Women

- ✓ RA 9336 or the GAD Budget Policy, which mandates government offices to allot 5% of MOOE for GAD-related projects
- ✓ RA 6725 strengthens the prohibition of discrimination against women in employment, promotion and training opportunities
- ✓ RA 7160 also known as the Local Government Code (LGC), which has been amended to provide seats for women in all of the 1,600 local legislative assemblies nationwide

Status of Filipino Women – Enabling Mechanisms

☛ **Laws and Policies to Empower Women**

- ✓ RA 7941 provides for the election of party-list representatives through the party-list system and the inclusion of women in the sectoral party list
- ✓ A lot more laws that empower women in areas such as, Employment/Economic; Politics; Health and Social Welfare; and Education

Best Practices and Big Hurdles

Status of Filipino Women – Best Practices

☛ Provision and monitoring of relevant and timely sex-disaggregated data that serve as basis for advocacy work towards advancement of women

- ✓ by government agencies (NSO, NSCB, DepEd, CHED, DOST, DOLE, OWWA, DSWD, etc.)
- ✓ by private institutions

☛ Recognition of women's work

- ✓ TOWNS (The Outstanding Women in the Nation's Service) Awards given to women who made significant impact to the country's economic and social development
- ✓ Outstanding Filipino women in fisheries and aquatic resources

Status of Filipino Women – Best Practices

- ☛ **Implementation of GAD-related programs/projects in various agencies made possible through RA 9336 (GAD Budget Policy); some examples are:**
 - ✓ TESDA's Project GREAT (Gender Responsive Employability And Training) for economic empowerment of women
 - ✓ Establishment of Day Care Centers in agencies such as the Philippine Information Agency, Department of Labor and Employment and the Department of Science and Technology where employees could bring their preschool children while at work

Status of Filipino Women – Best Practices

- ✓ In its efforts to address the issues of trafficking and illegal recruitment, the Philippine Ports Authority established a halfway house called "Bahay Silungan sa Daungan", literally "Shelter at the Port" for displaced women and children who may have found themselves to be victims of trafficking

Status of Filipino Women – Best Practices

- ☛ **Partnership between government and private agencies and NGOs in the implementation of GAD-related programs/projects**
 - ✓ TESDA and JICA for Project GREAT
 - ✓ Philippine Information Agency and *Arugaan* (an NGO) for its Day Care Center
 - ✓ Philippine Ports Authority and the Visayan Forum Foundation for its “Shelter at the Port”

Status of Filipino Women – Big Hurdles

- Although equality between men and women in the Philippines in terms of access to education and decent living seem to have been achieved, efforts have to be strengthened in the following areas:
 - ✓ Share of women in parliamentary, legislative and other decision-making positions in the government and in the industry
 - ✓ Share of women in S&T areas, specifically, engineering and technology, which is dominated by men

Thank you.

Maraming Salamat.