

# **Women on March in Goa**

## **The Gender Transition in Higher Education after the Statehood**

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### **I**

#### **Introduction**

This paper attempts to address the interesting phenomenon of dominance of women in higher educational sector of Goa—a remarkable postcolonial event which occurred after Goa attained statehood in 1987. The Indian state of Goa has been experiencing a rapid socio-economic and cultural transformation. At present it enjoys many of the highest human development indicators in India, matching some of the developed countries. Its' projected population at present is 1.45 million (Indian decennial census 2001 reported 1.348 million). When the Portuguese rule ended, the literacy was just 31 % whereas it stood at 82 % in 2001. Goa is a highly urbanized state in India. In 1960 there were just five towns and 15 % urban population. In 2001 the figures were, 44 towns and 50 % urban population. On economic front Goa has made tremendous progress mainly on account of the growth of mining, tourism and the service sector. Tourist arrivals in Goa have exceeded the state's population from 2001. The Gross state domestic product (GSDP) at current prices in 2003-04 was Indian Rupees (Rs.) 96570 million, up from Rs. 3930 million when Goa became a full-fledged state. The banks are flush with funds indicating a booming economy. Goa has lowest birth and death rates and a life expectancy of 68 years for the males and 72 for females. The sex ratio however has shown a declining trend since 1960, from 1066 to 960 in 2001 (Table 1). The sex ratio for 0-6 years age group was 933. On this background we intend to examine the changing pattern of female education in Goa.

Table 1 Female sex ratio in different talukas of Goa- population census 2001

State/district/taluka	Female sex ratio					
	Total population			Age-group 0-6years		
	Rural	Urban	Total	Rural	Urban	Total
Goa	988	934	961	952	924	938
North Goa	970	931	953	939	935	938
Pernem	943	942	943	921	827	907
Bardez	996	929	956	926	924	925
Tiswadi	1013	947	969	932	972	958
Bicholim	946	938	943	939	914	928
Sattari	961	964	962	935	980	941
Ponda	959	893	937	970	921	953
South Goa	1018	937	972	972	913	937
Mormagao	1026	868	893	917	889	893
Salcete	1065	986	1019	1000	928	957
Quepem	975	970	973	937	909	924
Sanguem	964	980	967	997	911	981
Canacona	996	921	975	925	998	944

## II

### Female literacy

What is the source of new recruitment in the higher educational field?. The answer lies in the rapid growth of female literacy since 1971 (Table 2) . The literacy data of 2001 census showed that out of 209,766 added to the literate population during 1991-2001 the share of males and females is almost equal being 104,972 (50.04 per cent) and 104,794 (49.96 per cent) respectively. The official census report comments – “It is quiet encouraging to note that females are not behind in the field of literacy in the state. It clearly indicates the high standard of females in the socio-cultural field of the Goan Society” . Domination of the females i.e. 22,615 in the total decrease of the number of illiterates i.e. 40,397 indicates the spread of female literacy in the state. Almost identical trend was noticed in the district population also. The improvement in female literacy rate was higher being 8.2 percentage points as compared to male literacy ate which is 5.2 percentage points.

Table 2: Literacy rates, 1960-2001

Year	Literacy rate percent		
	Male	Female	Total
1960	48.70	22.80	31.23
1971	54.65	35.79	45.31
1981	65.99	48.29	57.25
1991	83.64	67.09	75.51
2001	88.42	75.37	82.01

### Rural-urban literacy rate

As indicated in Table 3, there was a gap of 15.5 percentage points between the male and female literacy rates in rural Goa. Literacy rate among the urban males was as high as 94.2 per cent. The gap between the male and female literacy rate in North Goa and South Goa was almost identical being 13.3 and 12.6 percentage points respectively. The corresponding figures in rural areas were also comparable being 16.1 percentage points in North Goa as against 14.2 percentage points in South Goa. The gap between male and female literacy rates in urban areas of North Goa worked out 9.9 percentage points as against 11.1 percentage points in South Goa District.

Table 3: Literacy rates in different talukas of Goa- population census 2001 (per cent)

State/district/taluka	Rural			Urban			Total		
	P	M	F	P	M	F	P	M	F
Goa	79.7	87.4	71.9	84.4	89.5	79.0	82.0	88.4	75.4
North Goa	82.0	89.9	73.8	85.4	90.2	80.3	83.5	90.0	76.7
Pernem	80.6	89.5	71.1	82.1	89.0	74.8	80.8	89.5	71.6
Bardez	86.6	92.1	81.2	84.8	89.1	80.2	85.5	90.3	80.6
Tiswadi	82.4	89.4	75.6	86.3	91.1	81.1	84.9	90.5	79.2
Bicholim	81.7	90.6	72.3	86.8	92.9	80.3	83.8	91.5	75.6
Sattari	74.5	84.7	63.9	88.3	94.2	82.1	76.4	86.0	66.3
Ponda	82.0	90.6	73.0	84.7	89.2	79.7	82.9	90.1	75.1
South Goa	76.0	83.2	69.0	83.3	88.7	77.6	80.1	86.3	73.7
Marmagao	79.0	86.0	72.4	83.7	89.6	77.0	82.9	89.0	76.1
Salcete	79.5	85.5	74.0	83.7	88.3	79.1	81.9	87.1	76.8
Quepem	69.2	76.9	61.4	81.4	87.6	75.2	74.8	81.8	67.7
Sanguem	74.2	83.5	64.5	82.6	89.9	75.3	75.7	84.6	66.4
Canacona	72.8	80.6	64.9	80.1	85.9	73.7	74.8	82.1	67.2

### III

#### **Educational facilities for women**

There are several factors which have given rise to a gradual upsurge of interest among the women in Goa for higher education. We need to compare the present picture with the scenario during the Portuguese colonial rule.

#### **The colonial period**

Sr. Emma Maria, A. C. in her *Women in Portuguese Goa, 1510-1835* (2002) presents a concise chronological picture of status of educational facilities for women under the Portuguese rule. “Girls were not sent to schools, but were generally instructed at home. Later in 1606 they were educated at the Royal Convent of Santa Monica and in the Homes of Nossa Senhora de Serra and that of Santa Maria Magdalena.’ But the situation seems to have improved in the 19th century. Sr. Emma mentions that –“ New educational policies were approved in Portugal and they were extended to Goa. In 1846, a school for girls was opened at Panjim. In 1854 two more such schools were opened, one at Mapusa and another at Margao. In 1882, there was a move to start three special schools for girls in the three main concelhos of Goa, namely Ilhas, Bardez and Salcete. The first step was taken by the Provincial Board. Junta Geral de Provincia. The plan that was approved by the Government could not be implemented due to lack of funds. However, in the year 1887, at the initiative of Santa Casa de Misericordia de Goa, sisters of the Franciscan Hospitallers opened a school for girls, the school of Our Lady of Piety, A Escola de Nossa Senhora de Piedade, in the convent of Chimbél which was later transferred to Panjim. The subjects taught in the school were Portuguese, English and French, besides needlework, embroidery, cookery and other allied “housewifery” subjects. The institution was recognised by the Government and had to follow rules and regulations approved by the Government. In 1892, the local Government by an order dated 31 December, planned for the establishment of eight primary schools for girls including special texts for them in all fields of education.”

A significant development was the end of monarchy in Portugal. The republican administration adopted a liberal educational policy. By a government decree of 4 January 1911, a school for girls was established, the National School for the Female Sex, (Escola Nacional de Sexo Feminino) a secular institution in place of the college of Our Lady of Piety (Colegio da Nossa Senhora de Piedade) a congregational institution. A special school for girls’ education, the opening of the Normal School of teachers’ training to all communities creation of the New Lyceum, expansion of the already established Medical and Pharmacy courses and creation of the Commercial Institute for Professional Education were some of the salient features of reorganisation of the educational plan of the republican government. In 1920, a women’s Institute of Education (Instituto Feminino de Educacao) was established which provided courses in Domestic Science and music. The four -year secondary course comprised of the following subjects: Portuguese, French, English, Geography, History,

Mathematics, Physics and Chemistry, Natural Science, Drawing and Modeling, Educational handicraft, drill and games “suited to the fair sex,” music and singing. The three-year special course comprised of Portuguese, Literature, French, English, cutting and tailoring, embroidery, domestic economy, cookery, gardening, horticulture, rearing of domestic animals, drill music and painting. The period of Portuguese republican rule (1910-1926) was the only ray of hope for Goan women. The “Congress Provincial” discussed the progress of Goan women in a special session in 1931. Leaders of Goa’s Hindu community –Shambarao Sardessai and Dr. Atmaram Borkar championed the cause of appropriate education for Hindu women. Their views were supported by the teacher – Dona Propercia Correia Afonso. In 1933, the Saraswat Brahmin Samaj of Margao organized a brain storming session for three days to discuss the issue of womens’ education. This was followed by the opening of the three schools for girls. Slowly the girls came forward to enroll. Between 1935 to 1952, the figures indicate that 292 girls had completed primary school certificate examination as compared to 105 boys. The institution which was started in place of the Colegio da Nossa Senhora de Piedade in 1911 at the beginning of the republican regime, and since continued as a secular institution was closed on 15 May 1952. The government decree No. 7361, dated 31 October 1958, made primary education compulsory for children of both sexes, in the age group of seven and thirteen.

### **The post-colonial period**

Goa had limited opportunities for women in higher education under the Portuguese colonial rule. But this picture has changed radically at present. After integration with the Indian union, Goa was administered as an Union territory till the granting of full-fledged statehood on 30 May 1987. During the pre-statehood period (1962-1987) there was much emphasis on primary, middle and high school education. Goa follows the National Policy on education 1986, modified in 1992. The 10+2+3 pattern of education is implemented. The students spend 10 years in schools. After clearing the Secondary School certificate examination (SSCE) of the Goa Board of Secondary and Higher Secondary education (GBSHSE) ([www.goaeduboard.org](http://www.goaeduboard.org)), they can choose one of the four streams, i.e. Arts, Commerce, Science or Vocational in the Higher Secondary Schools (HSS) or post SSCE technical courses. This is the +2 stage-the beginning of higher education. After answering Higher Secondary School certificate examination (HSSCE) of GBHSE, the students can opt for graduation in general or professional colleges. This is the +3 stage of higher education. There are two central agencies which control graduate level education-the University Grants Commission (UGC) ([www.ugc.ac.in](http://www.ugc.ac.in)) and the All India Council for technical Education (AICTE) ([www.aicte.ernet.in](http://www.aicte.ernet.in)). The Goa University ([goauniversity.org](http://goauniversity.org)) is a public university established in 1985 by an act of Goa state legislative assembly. All the colleges in the state are affiliated to it. Goa University offers Post graduate courses of two-three years duration with a fixed intake capacity of students.

## **The post-Statehood period**

A very simple, working division of Goa's postcolonial period can be given as follows:

1. Period of Union territory administration of Goa, Daman and Diu, the former Portuguese ruled territories from 19th December 1961 to 29th May 1987.

2. The statehood period from 30th May 1987 till date.

The political history of Goa has influenced its economic history to a large extent. Socio-economic indicators clearly show the statehood period also resulted in a phenomenal growth in Goa's economy. The GSDP multiplied by 25 times. The per capita income rose substantially. Another indicator is the rapid urbanization of Goa during this period. We have selected the statehood period also from the context of the sweeping changes in India's economic trade and investment policies and the beginning of liberalization of the economy, growth of consumer market and the meteoric rise of the Indian middle class.

## **IV**

### **Data sets-the official educational statistics**

We have considered a data series of 18 years (hereinafter referred as 'study period') within which data for specific years was selected for a comparative chronological analysis of five temporal blocks. 1987-1988 was selected since it was the first year after Goa attained statehood status, 1992-1993 was selected as the beginning of the eighth five-year plan of the state, 1996-1997 was selected as the final year of the eighth five-year plan of the state, 1999-2000 was selected as a mid point of the ninth five-year plan and also as the last year of the previous century and 2004-2005 was selected, as the latest data was available only for that year. So in all five statistical data sets have been used for comparative analysis.

### **Major sources of data**

The directorate of education of Goa has a statistics section which compiles enrollment figures of the students at all levels of education, besides maintains statistics about educational institutions, teachers, schedule castes (SC), schedule tribes (ST), school drop out rates, gender ratio and rural urban distribution. The annual reports are titled 'Educational statistics at a glance' and are published regularly in September every year. The data series goes back to 1964-1965. This is the primary source of information. From government of India census office decadal census reports are available. The latest one pertains to 2001. From this demographic information and literacy rates can be obtained. Since 1999-2000, the Government of Goa also publishes economic surveys (ES), which contain important developmental information along with statistical tables. We have considered economic surveys from 2001-02 to 2005-06. The Goa University publishes an annual report every year giving the enrollment statistics in all its' affiliated colleges and the post graduate faculties.

V

### Major objectives

The questions which interested us were

1. Whether expansion of higher educational facilities have created better opportunities for the women to get admission?
2. Whether the gender ratio has been showing a positive change over the study period?
3. Whether the educational preference is shifting at different levels of higher education and to what extent?
4. Whether gender ratios in different streams reflect any particular trend which could be related to the market forces?
5. Whether at the post graduation level gender ratios have maintained a consistently positive profile over the study period?
6. Whether any trends indicating a better deal for women in higher education can be identified?

### Data analysis

For the purpose of analysis, data tables were compiled for three levels of higher education a) the +2 level known in Goa as Higher Secondary School (HSS) Level, b) The graduation/college level or the +3 Level and c) Post graduation level at the Goa University. Data from other post Matric courses and professional graduate courses has not been included owing to identified gaps in the time series.

After matriculation or +10 stage there are three options:-

1. Students can join a general stream of HSS unit
2. Choose a vocational course offered by the HSS unit or
3. Join institutions for professional or technical education which are not affiliated to the HSS board. These include mainly ITIs (industrial Training Institutes) and Polytechnics affiliated to All India Council For Technical Education (AICTE).

At +2 level the three conventional streams are Arts, Commerce and Science. After Government of India's new policy in 1986, Vocationalization at +2 stage was introduced in 1988-1999. At graduation level there are two major divisions

- a) Institutions which offer general education such as Arts, Commerce and Science and
- b) Institutions which offer professional courses such as pharmacy, medicine, dentistry, engineering, home science, architecture, fine arts and law. Depending on the type of degrees the graduation period is minimum three academic years and maximum 5 academic years.

At post graduation (PG) level there are four streams which are affiliated to the only University in the state, i.e. Goa University. Depending on the PG degree, the period of post graduation may differ from a minimum of 2 years to a maximum of 3 years. Higher degrees like M. Phil. and Ph.D. are also offered. The time series data is broadly classified on the basis

of selected years and the above mentioned levels of higher education. Enrollment figures for males and females for these years have been given in the table nos. 4–18. The gender ratio is expressed as percentages of females to the total enrollment. On basis of this an attempt has been made to answer the questions mentioned previously.

## VI

### **Better opportunities in higher education**

The data clearly shows that the higher educational facilities were well distributed after the growth of HSS units and colleges in rural areas of Goa thus enabling the women to get admissions easily and saving the time on traveling to urban centers.

#### **Growth of Higher Secondary Schools**

In 1987-1988 there were 23 HSS units. Their number rose remarkably to 49 in 1992-1993 at almost the end of the 8th five-year plan. There was a rapid growth of HSS units and the number reached 81 in 1996-7. This number has not changed since then. It is interesting to note that many of these higher secondary units have been established in rural areas. As compared to 12 HSS units in 1987-1988 (50%) in urban areas, in 2004-2005, the ratio favoured the rural areas with 47 (56%) HSS units in rural areas out of 81 indicating a dramatic social transition during the study period.

One of the reasons could be the spurt in female literacy experienced between 1971-1991. As compared to 36% female literacy in 1971, Goa had 67% literate females in 1991 indicating almost a 200% jump in two decades. Naturally the pre high school literate population availed the higher secondary facilities which were expanding in their neighborhood.

#### **Growth of colleges**

In 1987-1988 there were 12 institutions imparting general education and 12 professional education at graduation level. This number increased to 14 for general and 21 for professional education in 2004-05. A significant aspect was the opening of new government colleges for general education at Pernem, Sanquelim, Khandhola and Quepem thus bringing college education closer to the rural areas. A college of home science was also established specifically catering to the women in 1988-1989.

#### **Better facilities for post graduate education**

The Goa University came into existence on 30th June 1985. Earlier there was a Center of Post Graduation Instructions and Research (CPIR) established under the university of Bombay since June 1965. The first batch of students under Goa University were admitted in 1987-1988. The Goa University shifted to its own campus in 1991-1992. With the



establishment of hostel facilities for the lady students the post graduation departments experienced excellent growth since 1990-1993. Till BITS (Birla Institute of Technology and Science) Pilani established its' Goa campus at Zuarinagar in Marmagoa in 2005-2006, there was no other independent institution of post graduation education except Goa University. BITS Pilani is a deemed university.

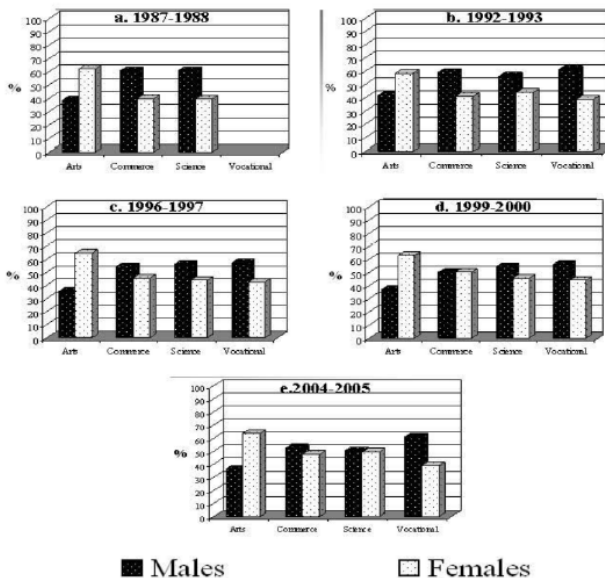
**VII  
The gender revolution in higher education**

We noticed a definite positive change in the enrollment of the women from higher secondary school level during the study period.

**The changing gender ratio at Higher Secondary level**

Female enrollment trends in the general streams (Arts, Commerce, Science) and Vocational stream offer contrasting pictures. The time series data is summarized in Tables 4-8 and the trends are plotted graphically as shown in Chart 1-a-e.

**Chart 1: Educational statistics at higher secondary level**



### General streams

In the year 1987-1988, at HSS level the gender ratio was tilted in favour of the males (54.20%) for general streams in 1992-1993. In the year 1992-1993, the female enrollment marginally went up from 45.8% to 46.93% in general streams. Turning point in gender ratio reached in 1996-1997 with 49.7% female enrollment. Gender transition was clearly visible in HSS education in 1999-2000 at 51.7%. This ratio has been since maintained at 51.77% overall during the study period. The female enrollment in general streams of HSS units increased by 6% after statehood thus ending the phase of gender imbalance at HSS level.

### Vocational stream

Vocationalization of HSS education began in 1988-1989 with full financial support from the central government. In 1992-1993, there were only 38.6% females in vocational stream. This percentage went up phenomenally in 1996-1997 and reached 57.53%. One reason was a large number of institutes which began offering a wide choice of vocational education courses. In 1999-2000 interestingly, the female enrollment decreased to 43.90% and at present it stands at 39.09% almost reaching the same level of 1992-1993.

One reason could be that as projected earlier by the government vocationalization did not result into immediate employment. This caused disillusionment among females over last 10 years. The drop in female enrollment for vocational stream is matched by the rise in female enrollment in Arts stream of HSS units.

#### Educational statistics for 1987-1988

##### Higher secondary level

Number of higher secondaries: 23

Number of institutions offering vocational education: 0

Table: 4 Enrollment for HSS courses

Stream	Arts		Commerce		Science		Vocational		Total	
	M	F	M	F	M	F	M	F	M	F
XI	1064	1546	2590	1616	1126	702	0	0	4780	3864
XII	506	999	1694	1186	883	601	0	0	3083	2786
Total M/F	1570	2545	4284	2802	2009	1303	0	0	7863	6650
Total M&F	4115		7086		3312		0		14513	
%	38.15	61.85	60.46	39.54	60.66	39.34	0	0	54.18	45.82

#### Educational statistics for 1992-1993

##### Higher secondary level

Number of higher secondaries: 49

Number of institutions offering vocational education: 25

Table 5: Enrollment for HSS courses

Stream	Arts		Commerce		Science		Vocational		Total	
	M	F	M	F	M	F	M	F	M	F
XI	1432	1842	2792	1804	1406	1158	953	597	6583	5401
XII	859	1365	1928	1467	1306	965	563	356	4656	4153
Total M/F	2291	3207	4720	3271	2712	2123	1516	953	11239	9554
Total M&F	5498		7991		4835		2469		20793	
%	41.67	58.33	59.07	40.93	56.09	43.91	61.4	38.6	54.05	45.95

**Educational statistics for 1996-1997****Higher secondary level**

Number of higher secondaries: 81

Number of institutions offering vocational education: 12

Table 6: Enrollment for HSS courses

Stream	Arts		Commerce		Science		Vocational		Total	
	M	F	M	F	M	F	M	F	M	F
XI	1171	1889	2755	2077	1622	1153	1162	839	6710	5958
XII	823	1745	2118	1966	1416	1213	901	693	5258	5617
Total M/F	1994	3634	4873	4043	3038	2366	2063	1532	11968	11575
Total M&F	5628		8916		5404		3595		23543	
%	35.43	64.57	54.65	45.35	56.22	43.78	57.39	42.61	50.83	49.17

**Educational statistics for 1999-2000****Higher secondary level**

Number of higher secondaries: 81

Number of institutions offering vocational education: 12

Table 7: Enrollment for HSS courses

Stream	Arts		Commerce		Science		Vocational		Total	
	M	F	M	F	M	F	M	F	M	F
XI	792	1167	2099	1842	1442	1163	1117	789	5450	4961
XII	743	1443	1969	2224	1503	1313	898	792	5113	5772
Total M/F	1535	2610	4068	4066	2945	2476	2015	1581	10563	10733
Total M&F	4145		8134		5421		3596		21296	
%	37.03	62.97	50.01	49.99	54.33	45.67	56.03	43.97	49.6	50.4

### Educational statistics for 2004-2005

#### Higher secondary level

Number of higher secondaries: 81

Number of institutions offering vocational education: 40

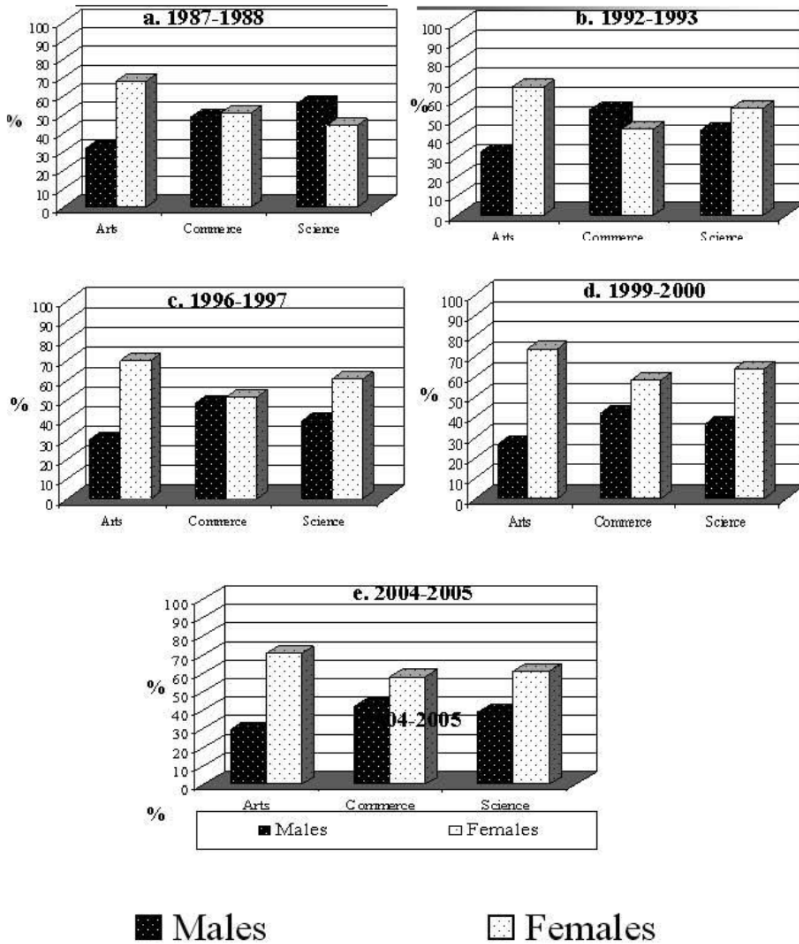
Table 8: Enrollment for HSS courses

Stream	Arts		Commerce		Science		Vocational		Total	
	M	F	M	F	M	F	M	F	M	F
XI	905	1450	2375	2034	1637	1557	1599	912	6516	5953
XII	675	1310	2095	2029	1574	1561	1212	892	5556	5792
Total M/F	1580	2760	4470	4063	3211	3118	2811	1804	12072	11748
Total M&F	4340		8533		6329		4615		23820	
%	36.38	63.62	52.38	47.62	50.73	49.27	60.91	39.09	50.68	49.32

### Gender ratio at graduation level

The time series data is summarized in Tables 9-13 and the trends are depicted graphically in Chart 2, a-e. This gender transition began in the pre statehood days in 1987-1988. After Goa got statehood, in 1987-88, we find a female enrollment ratio of 51.91% in the general streams of graduation. This increased to 53.33% in 1992-1993, 58.83% in 1996-1997 and 62.85% in 1999-2000 before marginally reducing to 61.25%. During the study period we detected a remarkable overall growth in the gender ratio favouring the females over the males by almost 10% points. The college campuses have now come to be dominated by females indicating an important social transition in post colonial Goan Society.

**Chart 2: Statistical data at Graduation level**



**Educational statistics for 1987-1988**

**Graduation level**

Number of institutions offering general education: 12

Number of institutions offering professional education: 12

Table 9: Enrollment at Graduation level (General streams)

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
F.Y	332	595	257	266	1082	861	1671	1722
S.Y.	227	522	285	269	885	636	1397	1427
T.Y.	149	392	178	218	529	477	856	1087
Total M/F	708	1509	720	753	2496	1974	3924	4236
Total M&F	2217		1473		4470		8160	
%	31.94	68.06	48.88	51.12	55.84	44.16	48.09	51.91

### Educational statistics for 1992-1993

#### Graduation level

Number of institutions offering general education: 12

Number of institutions offering professional education: 12

Table 10: Enrollment at Graduation level (General streams)

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
F.Y	480	1037	1385	1346	432	638	2297	3021
S.Y.	325	872	918	1081	334	514	1577	2467
T.Y.	354	820	990	1092	343	548	1687	2460
Total M/F	1159	2729	3293	3519	1109	1700	5561	7948
Total M&F	3888		6812		2809		13509	
%	29.81	70.19	48.34	51.66	39.48	60.52	41.17	58.83

### Educational statistics for 1996-1997

#### Graduation level

Number of institutions offering general education: 12

Number of institutions offering Professional education: 17

Table 11: Enrollment at Graduation level (General streams)

Stream	Arts		Commerce		Science		Total	
Sex	M	F	M	F	M	F	M	F
FY	515	919	1624	1339	448	493	2587	2751
SY	387	856	1266	993	258	362	1911	2211
TY	277	633	791	708	205	292	1273	1633
Total M/F	1179	2408	3681	3040	911	1147	5771	6595
Total M&F	3587		6721		2058		12366	
%	32.87	67.13	54.77	45.23	44.27	55.73	46.67	53.33

### Educational statistics for 1999-2000

#### Graduation level

Number of institutions offering general education: 14

Number of institutions offering professional education: 20

Table 12: Enrollment at Graduation level (General streams)

Stream	Arts		Commerce		Science		Total	
Sex	M	F	M	F	M	F	M	F
F.Y	362	774	1360	1797	372	593	2094	3164
S.Y.	254	826	1008	1397	247	451	1509	2674
T.Y.	244	793	785	1151	255	488	1284	2432
Total M/F	860	2393	3153	4345	874	1532	4887	8270
Total M&F	3253		7498		2406		13157	
%	26.44	73.56	42.05	57.95	36.33	63.67	37.14	62.86

### Educational statistics for 2004-2005

#### Graduation level

Number of institutions offering general education: 14

Number of institutions offering professional education: 21

Table 13: Enrollment at Graduation level (General streams)

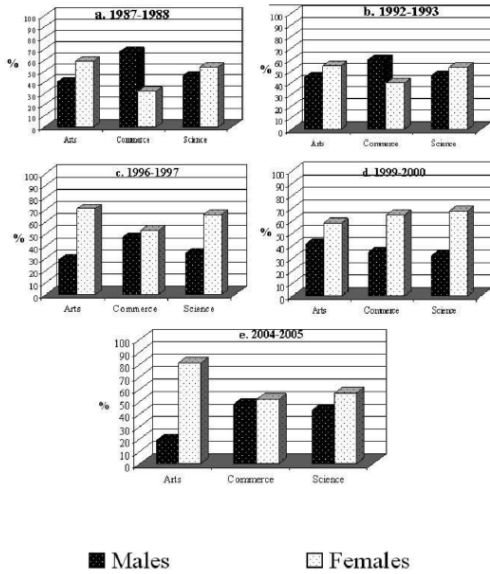
Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
F.Y	398	967	1480	1885	421	602	2299	3454
S.Y.	326	725	1125	1653	332	569	1783	2957
T.Y.	290	724	1084	1491	300	473	1674	2688
Total M/F	1014	2416	3689	5029	1053	1644	5756	9099
Total M&F	3440		8718		2697		14855	
%	29.41	70.59	42.25	57.75	39.04	60.96	38.75	61.25

### Gender transition at post graduation level

The female gender ratio at post graduation level has more or less followed the same growth trend at the graduate level (refer to Tables 14-18 and Chart 3, a-e). In 1987-1988 it was 48.07% which increased to 49.3% in 1992-1993 and reached its' peak in 1996-1997 at 66.12%, before falling to 63.29% in 1999-2000 and further to 62.9% in 2004-2005. The fall from the peak ratio in 1996-1997 is attributed to the fixed number of seats in all the departments in Goa University and the change in admission policy by conducting written tests. However the high female gender ratio is being maintained in Goa University on account of the predominance of female students in the arts and science faculties.



**Chart 3: Educational statistics at Post Graduation Level**



**Educational statistics for 1987-88  
Post graduation level**

Table 14: Enrollment in general streams

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
I	80	94	103	48	35	33	218	175
II	22	53	41	20	16	27	79	100
Total M/F	102	147	144	68	51	60	297	275
Total M&F	249		212		111		572	
%	40.96	59.04	67.92	32.08	45.95	54.05	51.93	48.07

**Educational statistics for 1992-93  
Post graduation level**

Table 15: Enrollment in general streams

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
I	80	96	55	45	74	80	209	221
II	67	84	84	47	53	67	204	198
Total M/F	147	180	139	92	127	147	413	419
Total M&F	327		231		274		832	
%	44.95	55.05	60.17	39.83	46.35	53.65	49.64	50.36

**Educational statistics for 1996-1997**

**Post graduation level**

Table 16: Enrollment in general streams

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
I	45	147	37	34	51	92	133	273
II	59	107	23	33	35	75	117	215
Total M/F	104	254	60	67	86	167	250	488
Total M&F	358		127		253		738	
%	29.05	70.95	47.24	52.76	33.99	66.01	33.88	66.12

**Educational statistics for 1999-2000**

**Post graduation level**

Table 17: Enrollment in general streams

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
I	50	90	11	19	49	90	110	199
II	56	59	10	20	31	79	97	158
Total M/F	106	149	21	39	80	169	207	357
Total M&F	255		60		249		564	
%	41.57	58.43	35	65	32.13	67.87	36.7	63.3

### **Educational statistics for 2004-05**

#### **Post graduation level**

Table 18: Enrollment in general streams

Stream	Arts		Commerce		Science		Total	
	M	F	M	F	M	F	M	F
Total M/F	54	232	112	121	186	244	352	597
Total M&F	286		233		430		949	
%	18.88	81.12	48.07	51.93	43.26	56.74	37.09	62.91

### VIII

#### **A clear and distinctly positive trend**

For the study period, on the basis of statistical analysis for general streams we can see a significant increase in female enrollment at all the three levels of higher education in Goa as indicated in the Table 19. Post statehood, over the study period, the enrollment for HSS education level increased by 5.97 percentage points. This means that at the very doorsteps of higher education the rate of entry of women is steady but the gender ratio is in their favour. The picture has altered radically at graduation level with a significant rise of 9.49 percentage points pointing to the awareness among the young women that they need at least a College degree for their educational empowerment. The real gender revolution has occurred at the university/post graduation level with total dominance by the women. The increase 14.89

percentage points is substantial. This shows the yearning among the graduate women to scale higher echelons of education. We verified the figures on the live register of the Goa’s employment exchange (Table 20) to check the unemployment levels. As compared to the males there are less number of female educated unemployed with higher qualification, except at Post graduate level. This shows that the females are finding relatively better employment avenues. Many are self-employed.

Table 19: Gender revolution in higher education (1987-1988 to 2004-2005)

Years	Higher secondary level (%)	Graduation level (%)	Post graduation level (%)
1987-1988	45.80	51.91	48.02
2004-2005	51.77	61.30	62.91
<b>Percentage change</b>	<b>+5.97</b>	<b>+9.49</b>	<b>+14.89</b>

Table 20: Number of applicants on live register of employment exchange, sexwise for the year 2005

Sr. No.	Level of education	Number of applicants (2005)		
		Male	Female	Total
1	Below Matriculate	13626	1592	15218
2	Matriculates	23893	10192	34085
3	HSSC	18423	10311	28734
4	Graduates	9151	8651	17802
5	Post graduates	862	1143	2005
6	Diploma holders	3057	534	3591
	<b>Total</b>	<b>69012</b>	<b>32423</b>	<b>101435</b>

## IX

### Factors responsible for the gender revolution

The above analysis proves that the women are on the march after Goa attained statehood in 1987. We speculate that several factors may be responsible for this phenomenon. We are outlining only a few of these. An exhaustive sociological research is recommended. Comparisons are possible with states like Kerala. A detail treatment of some of these points would be attempted in future in a separate publication.

1. The spread of school education in the pre-statehood period and the rapid rise in female literacy after 1971

2. A determined effort to remove gender bias from educational curriculum

3. A sustained and positive role played by the vernacular print media, the state owned Radio, TV channels, the womens' clubs and the Parent teachers' associations to emphasize better education for the women

4. The impact of Integrated Child Development Programme (ICDS)

5. Introduction of the Panchayat Raj system since 1995 and more representation of the women on Village panchayats

6. The impact of International year of the girl child and the special schemes announced by the state government for girls

7. A radical spurt in the Non Governmental Organisations (NGOs) championing the cause of women

8. The projection of the female rank holders and their academic success by the local mass media

9. The empowerment through the uniform civil code ensuring the girls equal inheritance rights and the awareness among them that higher education can provide them more security

10. The rapid expansion of higher educational facilities in the rural areas

11. The higher mean age of marriage for young females in Goa as compared to all India average, thus making the girls opt for higher education

12. Rapid urbanization of the state and nuclearization of the families

13. The generally healthy co-education culture with free intermixing of either of the sexes in academic campuses

14. Establishment of Goa Womens' commission and popularization of welfare schemes like 'Yeshaswini'

15. Impact of new technologies and globalization- making the women aware about the need to be competitive

16. Improved mobility- a phenomenal number of women own driving licenses for the two and four wheeler vehicles. Since most of the higher educational institutions are within a few kilometers driving distance the female students find it convenient to travel

17. Improved communication and security- the tremendous expansion of landline telephones, cellphones, Internet has given confidence to the women that they are more secure and connected despite being away from the home and the family. Higher female enrollment at graduate and post graduate level also match the extent of penetration of cellphones in these campuses

We foresee the trend of female dominance in higher education in post statehood Goa, being sustained and maintained in the future. This augurs well for the state of Goa considering the concerns expressed over the falling sex ratio. A Goan society with highly educated and increasingly assertive women is clearly emerging. Their voices are felt increasingly in social, cultural, political and environmental arenas.

**Notes and references**

1. The economic statistics has been taken from the Economic survey, Government of Goa, directorate of Planning, Statistics, Evaluation, years-2001-02, 2002-03, 2003-04, 2004-05, 2005-06.
2. The educational data is based on the analysis of statistics from the annual Educational statistics at a glance, Directorate of education, Government of Goa, years 1987-88 to 2004-05
3. The enrollment figures for 2004-05 post graduate departments have been based on Annual report, 2003-04, Goa University, Taleigao, Goa
4. The census data has been obtained from Census of India, 2001 provisional Population totals, Series 31, Goa, Paper 2-of 2001, Director of Census operations, Goa
5. Sr. Emma Maria, A.C., Women in Portuguese Goa (1510-1835), Institute for research in Humanities and social sciences (IRISH), Tellichery, Kerla, India, 2002.