GOA UNIVERSITY



TALEIGAO PLATEAU, GOA - 403206

Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

INSTITUTIONAL DEVELOPMENT PLAN (DRAFT)



Introduction

Goa University was established in 1985 by an Act of the State Legislature, is located on a picturesque campus spread over 400 acres area of Taleigao plateau overlooking the Zuari River, within close vicinity of the capital city of Panaji, in North Goa. As the only university in the State of Goa, Goa University has, since its inception, sought to address the academic aspirations of the student community in the State, through well-conceived undergraduate programs at its affiliated colleges, and postgraduate programs at the University departments.

The University has played a vital role in the generation and dissemination of knowledge, enhancement of capability by training human resource for the academic, industrial and services sectors. It has provided avenues for advanced learning in frontier disciplines of Science, Humanities and Social Sciences, Commerce and Management which were not adequately available in the State until the inception of the University.

Vision and Mission

The broad vision of the University is to attain global visibility by developing trained human resource on par with global standards, having a high degree of international expertise, socially inclusive perspectives, cross cultural competencies and ethical character while meeting the employment and knowledge aspirations locally.

Towards this end, the mission of the University has been to create conducive academic environment of high standards and impart higher education with a state-of-the-art infrastructure and high moral climate.

The University teaching Departments, have incorporated a wide-range of advanced and inter-departmental / interdisciplinary teaching components and research methods in almost all programmes / courses. The University has been one of the earliest to introduce

the **Choice Based Credit System(CBCS)** with modular courses in all the campus based PG programmes as recommended by UGC. The University was assessed and accredited by NAAC in 2009 with B Grade and will be re-accredited by July, 2014.

Teaching Programme at the University

The University offers 32 programms at the moment in a variety of subjects by taking in to consideration the National perspectives on higher education and also the State manpower requirements. Table 1 below depicts the academic programmes offered by Goa University through its teaching departments on campus.

Table 1: List of Academic Programmes offered at Goa University

M.A. in	M.Phil in	Ph.D in
1. English	1. English	1. English
2. French		2.French
3. Hindi	2. Hindi	3. Hindi
4. Konkani	3. Konkani	4. Konkani
5. Marathi 4.	4. Marathi	5. Marathi
6. Portuguese		
7. Sociology	5. Sociology	6. Sociology
8. Economics	6. Economics	7. Economics
9. Philosophy	7. Philosophy	8. Philosophy
10.History	8.History	9.History
11.Political Science	9.Political Science	10.Political Science
12. International Studies	10.Latin American Studies	11.Latin American Studies
M.Sc. in		
13.Botany	11.Botany	12.Botany
14.Zoology	12.Zoology	13.Zoology
15.Microbiology	13.Microbiology	14.Microbiology
16.Marine Microbiology		
17.Marine Science	14.Marine Science	15.Marine Science
18.Marine Biotechnology	15.Biotechnology	16.Biotechnology
19.Biotechnology		
20.Earth Science	16.Earth Science	17.Earth Science
21.Chemistry (Organic,	17.Chemistry (Organic,	18.Chemistry
Physical, In-organic &	Physical and In-organic	
Analytical Chemistry)	chemistry)	
22.Mathematics	18.Mathematics	19.Mathematics
23.Physics	19.Physics	20.Physics

24.Electronics		21.Electronics
M.Com. in		
25.Commerce	20.Commerce	22.Commerce
M.C.A. in		
26.Computer Science	21.Computer Science	23.Computer Science
M. Tech. In		
27.Computer Science		
M.B.A. in		
28.Management Studies	22.Management Studies	24. Management Studies
29.Financial services		
30.Tourism & Hospitality		
(Integrated course)		
B.LIB/M.LIB.	•	•

31.Library & Information Sc.

PG Diploma in

32.Clinical Genetics and Medical Laboratory Techniques

Source: NAAC Self Study Report, 2014:GoaUniversity

Students Enrollment

The students enrollment in GoaUniversity has been on an increase. Stduents are enrolled in PG Programmes, M.Phil, Ph.D Programmes, and in some cases in Diploma Programmes. Table 2 reveals that more than 70 percent enrollment in GoaUniversity is of feamle students. Enrollment also includes students from outside GoaState and foreign students.

Table 2: Students enrolled in the University Departments in the current academic year: Category Wise

Course	Courses		PG		M.Phil		Ph.D		PLOMA
		M	F	M	F	M	F	M	F
From	From Goa State		1062	2	7	34	37	7	33
Outsid	Outside Goa State		31						
Foreig	Foreign Students		4						
Total		384 1098		2	7	34	37	7	33
Grant Total		1482		9		71		40	

Source: NAAC Self Study Report, 2014: Goa University.

The Table (2) also highlights the need for increasing the enrollment in M.Phil. and Ph.D. Programmes. In order to provide more quality in higher education, the University should pay more attention to increase in the enrollment of M.Phil. and Ph.D. students. The share of M.Phil. and Ph.D students to total number of students is less than 5 percent.

Inclusive Education

Goa University has strictly followed the reservation policy with regard to the students' admission. The number of SC, ST and OBC students seeking admission to the Goa University is on an increase. The equity concerns that University showed in admission policy have already started showing results. Although the number of SC, ST, OBC students taking admission for PG courses is on the increase, the same trend is not seen in the case of M.Phil and Ph.D Programmes.

Table 3: The Enrollment of S.C., S.T. and O.B.C. students

Catanania	2009	- 2010	2010	-2011	2011	- 2012	2012 - 2013		
Categories	Male	Female	Male	Female	Male	Female	Male	Female	
SC	8	9	6	11	9	8	8	13	
ST	21	21	24	21	26	29	29	51	
OBC	59	85	58	96	46	112	51	140	
General	275	500	256	538	238	594	225	618	
Total	363	615	344	666	319	743	313	822	

The Faculty Profile

The institutional excellence in Higher Education depends to a large extent on it's faculty profile. Goa University bears one of the best faculty profiles among the State Universities in the country. The recruitment policy of Goa University has ensured a desirable degree of diversity in its faculty profile, with more than 50 percent of the faculty members being

recruited from outside the state/ having academic qualifications from other Universities/ institutes. The record of faculty publications is also quite satisfactory.

Table 4 Faculty Publications

The Publication Details of Faculty: Last four Years						
National	300					
International	196					
Monographs	6					
Chapters in Books	31					
Books edited	2					
Books with ISBN with details of	3+					
publishers						
Citation Index – range	average 1-18					
SNIP	0.336 - 1.5664					
SJR	0.114- 1.778					
Impact Factor – range	0.2 - 6.279					
h-index	2 – 43					

Source: NAAC Self Study Report, 2014: Goa University

The number of research projects awarded to the faculty members is also quite encouraging. As such, Goa University has a great potential to attain further excellence in Higher Education. In order to augment and accelerate this process, the following plan is submitted:

RUSA INSTITUTIONAL DEVELOPMENT PLAN (IDP) OF GOAUNIVERSITY

1. INSTITUTIONAL BASIC INFORMATION

1.1Institutional Identity:

Name of the Institution : Goa University

• Is the Institution approved by regulatory body? : Yes

• Furnish approval no.: UGC letter No. F5-8/77 (CPP) dated 19.03.1987

• Type of Institution : Affiliating

• Status of Institution : State University

• Name of the Head of Institution and Project Nodal Officers

Head and Nodal Officer	Name	Phone Number (office)	Mobile Number	Fax Number	E-mail Address
Head of the Institution	Dr. S. R.Shetye Vice-Chancellor Prof. V.P. Kamat	6519001 6519007	9011056 605	0832- 2451184	vc@unigoa.ac .in
(Full time Appointee)	Registrar	6519007	9225532 577	0832- 2451184, 2452889	registrar@uni goa.ac.in
RUSA Institutional Coordinator	Dr. R.V. Pai Professor	6519339			rvpai@unigoa .ac.in
Nodal Officers for	•			T	
Civil work including Environment Management	Shri Sangam Talaulikar Assistant Engineer	6519030			sangam@uni goa.ac.in
Procurement	Shri Leo Macedo Assistant Registrar (Purchase)	6519024			leo@unigoa.a c.in
Financial Aspects	Shri Amey Verenkar Assistant Registrar (Finance)	6519026			amey@unigo a.ac.in
Equity Assurance Plan Implementation	Shri Albert Fernandes Assistant Registrar-PR	6519019/ 025			albert@unigo a.ac.in

1.2Academic Information:

• UG/PG/Ph.D. programs offered during the Academic year 2013-14

Sr. No.	Title of programs	Level(UG,PG,Ph.D)	Duratio n (Years)	Year of starting	Sanctioned annual Intake	Total student strength
1	Masters	PG	2	1985	817	1482
2	Diploma	PG	2		30	40
3	Doctorate	Ph.D	4	1986	71	469

Whether Institution is Accredited? Yes

Grade... B When....2009

Accreditation Status of UG programs: NA

Title of UG	Whether eligible	Whether	Whether
programs being	for accreditation	accredited as on	"Applied
offered	or not?	31 st March 2014	for" as on 31 st
			March 2014
NA	NA	NA	NA

• Accreditation status of PG programs:

Title of PG programs being	Whether	Whether	Whether
offered	eligible for	accredited	"Applied
	accreditation or	as on 31 st	for" as on
	not?	March 2014	31 st March
			2014
Total 24 Programs	Yes	No	Yes
(MA/M.Sc/M.Com/MBA/MCA			

1.3Faculty Status (Regular/On-Contract Faculty as on March 31st, 2014)

Faculty Rank	d Regular	Present Status : N Highest Qualifica Doctoral Degree				Number in Position by ation Masters Degree Bachelor Degree						of regular on		of contract on		
	No. of sanctioned Regular Posts	Engineering			Disciplines	Engineering	Disciplines	Other	Disciplines	Engineering	Disciplines	Other	Disciplines	Total Number of faculty in Position	Total Vacancies	Total Number of faculty in Position
		R	С	R	С	R	С	R	С	R	С	R	С	15= (3+5+7+9 + 11+13)	16= (2- 15)	17= (4+6+8+10+1 2+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	-		
Prof	31			3				-	-			-		3	28	
Asso. Prof	63			22				5						27	36	
Asst. Prof	91			66				6						72	19	26
Total	185			91				11						102	83	16

Prof=Professor, Asso. Prof=Associate Professor, Asst. Prof=Assistant Professor, R=Regular, C-Contract

1.4Baseline Data (all data given for the following parameters to All discipline)

S.No	Parameters	
1	Total strength of students in all programs and all years of	1477
	study in the year 2013-14	
2	Total women students in all programs and all years in the	1087
	year 2013-14	
3	Total SC students in all programs and all years in the year	26
	2013-14	
4	Total ST students in all programs and all years in the year	106

	2013-14	
5	Total OBC students in all programs and all years in the year	236
6	2013-14 Number of fully functional P-4 and above level computers	750
	available for students in the year 2013-14	730
7	Total number of text books and reference books available	155786
	in library for UG and PG students in the year 2013-14	
8	% of UG students placed through campus interviews in the year 2013-14	NA
9	% of PG students placed through campus interviews in the year 2012-13	10
10	% of high quality undergraduates (>75% marks) passed out in the year 2013-14	NA
11	% of high quality postgraduates (>75% marks) passed out in the year 2012-13	17
12	Number of research publications in Indian refereed journals in the year 2013-14	118
13	Number of research publications in International refereed journals in the year 2013-14	17
14	Number of patents obtained in the year 2013-14	3
15	Number of patents filed in the year 2013-14	3
16	Number of sponsored research projects completed in the year 2013-14	17
17	The transition rate of students in percentage from 1st year to 2nd year in the year 2013-14 for:	
	(i) all students (ii) SC (iii) ST (iv) OBC	99%
		99%
18	IRG from students' fee and other charges in the year 2013-14 (Rs. In lakh)	1096.3 6
19	IRG from externally funded R&D projects, consultancies in the year 2013-14(Rs. In lakh)	9.14
20	Total IRG in the year 2013-14 (Rs. In lakh)	1106
21	Total annual recurring expenditure of the institution in the year 2013-14 (Rs. In lakh)	3632.8 7

2.2 Executive Summary of IDP

The State of Goa is unique in many respects. It is one of the highly developed states in India. In terms of per capita GDP and other socio-economic indicators, Goa occupies a high standing among Indian states. Goa has 100 percent literacy, 100 percent financial inclusion, very high life expectancy and very high preferred marriageable age among both male and female.

Goa has a service sector driven economy, which contributes around 60 % of its GDP. Industrial sector also plays a key role in the economy of Goa, contributing around 30 percent of its GDP. The share of agriculture to GDP is less than 10 percent. Tourism and mining are the two major economic activities in Goa. Of the various industries, the pharmaceutical industries have a special significance to the State. Goa is known for its quality infrastructure in the form of roads and communication networks.

Thus, the State of Goa meets all the basic requirements for the growth of Higher Education sector. Since its liberation in 1961, and particularly after attaining Statehood in 1986, it has made rapid progress in the domain of Higher Education.

Access to Higher Education in Goa

India's Gross Enrollment Ratio (GER) projected for 2021-22 is 32 percent. Goa has already achieved this GER. As per the latest available data, India's GER is 19.4 percent, whereas Goa's GER is 33.2 percent. Thus, Goa occupies the third position in GER ranking among Indian states, after Chandigarh (41.4%) and Manipur (35.9), which rank first and second respectively. The Institutional density (number of institutions per 1000 sq. meter) of the State is 16.2 percent and it occupies 13th Position among its peers. But although, the institutional density is slightly low in Goa, its performance in GER is very good. This is an indication that Goa has performed better than many other states with respect to the access to higher education.

Establishment of Goa University in 1986 marked the beginning of a new era in the higher education scenario in the State. Being the only state run University, Goa University is the source of pride and prestige not only for its academic community but also for the people

of Goa at large. Goa University has completed 25 years of its dedicated service to the Goan society and is looking forward to further expansion of its endeavours in future. At present, there are 60 colleges affiliated to Goa University and it aims at enhancing its GER. It is a fact that most of the developed countries in the world have a GER above 50 percent. Therefore, achieving a GER of 50 percent and above is a major challenge for Goa. In fact, even the sustenance of its GER at 30 to 35 % will be a big challenge for the State. The high GER of Goa, as indicated in various studies and reports, does not really reflect in the enrollment at Goa University. The Departments of Goa University continue to have a total enrollment of less than 1000 students per year, which is quite low as compared to that of many other State Universities. Therefore, with regard to access as seen from the Goa University's perspective, it has a long way to go.

In view of the above, under its, Institutional Development Plan (IDP), Goa University has proposed innovative M.A./ M.Sc. prorammes in order to visibly enhance the accessibility to higher education in Goa. There are also proposals meant to improve the infrastructural facilities to pave the way for substantially increasing the students' enrollment.

Equity Perspective

In our country wide disparity in Higher Education is visible across geographical regions, often due to gender discrimination, socio economic deprivation and socio religious preoccupations among diverse groups. This has prevented the much-needed trickling down of the fruits of higher education to the deprived and marginal sections of society. While the situation in Goa is not as bad as in several other States, it is also not an exception to this general phenomenon to a desirable extent.

Goa's higher education institutions are spread over two districts and 12 Talukas. Goa is a state where rural urban divide seems to exist in overall economic development. Tourism dominated coastal talukas are highly developed and hinterland talukas are less developed. The educational institutions are unevenly spread between rural and urban areas. Since the Goa University is the only university in the State, this issue needs to be urgently looked into and duly rectified. The primary concern of the University is to bring the students

from rural areas into the University system for availing of the opportunities of post graduate education. Hence, it is a major challenge for the University to create an environment conducive to the education of rural students.

Apparently, the GER of SC, ST and OBC in Goa is very high. GER of ST is one of the highest in the country. GER of ST population is around 90 percent as per the NSSO 66th round estimation. GER of OBC is also very encouraging having around 49 percent. GER of SC population in the State is negligible but then the SC population in Goa is also very less. Since NSSO estimate is based on a small sample, it is necessary to look at these figures with a little caution. As per the estimate cited earlier, Goa has made much progress in inclusive higher education. However, things are not very rosy with regard to the enrollment of SC, ST and OBC students at the Goa University. Goa State hardly finds qualified candidates for various academic posts reserved for SC, ST and OBC. What is important is to provide access to higher education to SC, ST and OBC categories which would empower them and provide them employment. Otherwise expected results of demographic growth will not come forth. To achieve the same, increasing the enrollment of SC, ST and OBC at the post graduate level as well as at M.Phil, Ph.D is of great significance.

Enrollment of women, in higher education in Goa, is very high and has been showing an increasing trend in the recent years. More than 70 percent of students at Goa University are women. However, the same trend is not visible in the employment scenario. Even in faculty recruitments, the share of women is low. The employability of women has been found to be much less as compared to men. This is a matter for serious concern. Unless the higher enrollment of women in higher education is translated into higher employment and income prospects, higher education may not succeed in bringing the much needed economic change aligned to gender parity.

The IDP of Goa University has placed a special emphasis on the equity front. The IDP proposes for scholarship schemes for SC/ST/OBC, Physically handicapped students, besides NET/SET coaching, remedial classes, etc. A proposal on new teaching methodology and pedagogy to encourage marginalized students is also included in the IDP

Excellence in Higher Education

Not a single higher education institution in India figures in the first 200 top-ranked institutions in the world. The Honourable President and Prime Minister of India have emphasized time and again, the need for improving the standards of higher education in our country. Excellence is a prime aim of the XIIth plan strategy. There are many parameters one would look at in evaluating the excellence of an educational institution. Employability and employer-satisfaction could be considered as a measuring rod of academic excellence. Though the Goa University graduates in general find jobs, there are indications that the salary paid to them does not commensurate with the qualification. It implies that their ability to perform certain tasks does not commensurate with their qualifications. Improving the quality of higher education is another major challenge for Goa University and its affiliated colleges. The number of candidates qualifying in national level examinations is also relatively low.

Low Student-Teacher ratio can contribute a lot in improving the standard of higher education institutions. Goa has one of the lowest Student-Teacher ratios as compared to other states. Nevertheless, it is not reflected in students' performance. It reveals that low student teacher ratio by itself may not lead to better excellence. It is only a necessary condition and not a sufficient condition for better performance and excellence. What is needed along with low student teacher ratio is the basic infrastructure and other amenities. Though the low student teacher ratio is an opportunity for Goa University, providing of world class infrastructure seems to be a challenge.

It is widely accepted and sometimes advocated that research and teaching go side by side. Academic excellence to a large extent depends on the research output of faculty and students. The record of publications of different departments shows that the university faculty has the capability to publish in renowned journals. There is need to allocate more funds to improve the research infrastructure in terms of modern equipments, computers, journal subscriptions, lab facilities. Moreover, faculty members need to be encouraged to conduct research through motivation and proper incentive mechanism.

The IDP has included proposals which would certainly enhance the excellence provided it is sanctioned and implemented. Proposals on new programmes, infrastructural development through expansion of lab space, modern equipments, scholarship schemes for Ph.D students, faculty development programmes, etc, are expected to enhance the excellence in higher education.

Administrative and Institutional Reforms

To achieve access, equity and excellence, there is urgent need for more reforms in the administrative process and institutional process. University administration must be freed from bureaucratic hurdles. The need of the hour is academic and financial autonomy in the functioning of University. A technology based administrative reform is urgently needed to improve efficiency in university administration. A proposal to modernize computer networking for administrative efficiency is included in the IDP

2.3 Details of SWOT Analysis

(i) Methodology Adopted for SWOT analysis

Data

The Data for the SWOT analysis has been collected from various departments of Goa University. The Goa University has recently submitted its NAAC self study report and huge data has been collected from the departments on various academic and non-academic aspects. The data available is classified into various categories, namely, faculty, students, infrastructure, etc. Various ratios, for example, ratio of vacant positions to total sanctioned strength, ratio of temporary teachers to permanent teachers, etc. have been worked out to identify the strength and weakness of Goa University. Information on years of experience, number of Ph.Ds guided, number of publications, range of impact factor, h index, etc. have been used as indicators to assess the strength of the University. The data on faculty with projects, faculty in national and international committees, editorial boards, etc. provided the information on visibility of the faculty at national and international level. SWOT analysis also used the report of Academic Audit Committee

constituted by the Chancellor of Goa University in 2011 to study the academic performance of Goa University.

The information collected on student teacher ratio, the number of students passed NET/SET examinations, staff and student diversity, extension activities, 'beyond syllabus participation' of the students, etc. provided much needed input to arrive at strength, weakness and opportunities.

The discussion with Deans, Heads of the Departments and with individual faculty members, helped the Planning Team to understand the strength and weakness of the University. Planning Team also had a brain storming session on various qualitative aspects of SWOT analysis. However, the Planning Team has depended more on available data, its analysis and interpretation.

The inference are drawn based on data analysis and discussion. Wherever necessary, simple statistical tools were used to draw the inferences

(ii) Inferences Derived from SWOT Analysis

Strength:

(i) Government Support

Goa University is the only University in the state of Goa and the government has been always supporting the university. Political interference in the university matters is almost nil.

(ii) Conducive academic environment

100 percent literacy, very high life expectancy, social and religious harmony, peace loving people, disciplined student population, growth of service sector, tourism based economy etc. create a very good academic environment for the Goa University to prosper.

(iii) Locational Advantage

Small is beautiful. Goa being a small state gives many locational advantages to Goa University. The Goa University is centrally located and geographically close to the capital city which enable the students from all parts of the state to have access to higher education at the University.

(iv) Linguistic Advantage

Goa being a tourist place most people are English speaking. Students of Goa University, in general, never had any problem with the English language. Goa University has great potential to attract faculty and students from any part of the World/Country

(v) Highly qualified academic staff

Majority of the faculty members are with Ph.D. The faculty members are drawn from nationally and internationally recognized Indian institutions like IISc, IIT, JNU, HCU, TIFR and other important central and state universities.

(vi) High research potential of the faculty.

Many of the faculty members particularly in science disciplines have high impact factor publications. Faculty members in science and social sciences have publications with h index. Faulty members have attracted huge sums of project funds.

(vii) Young University.

Average age of faculty members is close to 45. Young and enterprising faculty members can bring dynamic changes in the higher education scenario in Goa provided adequate support and incentives are given.

(viii) Trained administrative staff

Goa University has trained administrative staff who can handle efficiently the administrative and financial matters with ease.

(ix) Visiting research professorship scheme

An innovative scheme sponsored by Govt. of Goa brings to campus highly reputed individuals as visiting Professors to interact with faculty and students. Eminent academicians like Prof. Romila Tapar, Prof. Madhav Gadgil, Prof. Amit Bhaduri. Smt. Subha Mudgal, etc. are involved under this novel project at the Goa University.

(x) Choice Based Credit System (CBSC)

University recently has introduced choice based credit system at the Master Level in all its teaching departments. It provides lot of flexibility in the selection of courses across disciplines and can be an impetus to excellence. The semester system with 100% internal evaluation, compulsory project at PG level, autonomy in curriculum design and transparent method of performance appraisal for teachers make CBSC at the Goa University a unique one.

(xi) Excellent Library and learning resources

The library of the Goa University is spacious and has a good collection of resources including e-learning. Library has very good holding of books and subscribes number of reputed National and International journals. Besides, the library also subscribe to UGC Inflibnet and other data bases.

Weaknesses:

(i) Small catchment area

Catchment area for the University is limited. Goa being a small state, University is not able to attract more students from other States.

(ii) Inadequate Infrastructure

Infrastructure in terms of class rooms, big lecture halls, hostels, canteen facilities etc. is inadequate.

(iii) Inadequate Faculty strength

Almost 35 percent of total sanctioned positions remain vacant or are filled with contract teachers. It has not only affected teaching but also the research activity.

(iv) Administrative Bottlenecks

Delay in processing of files, delay in decision making mainly due to the shortage of supporting staff and technical staff. Further, the curtailment of internal autonomy through an amendment to Goa University Act in 2003 by insertion of new sections 25A and 25B necessitating the University to seek prior approval of the Government on certain proposals of the University has aggravated the situation in terms of implementation of the decisions taken by its Statutory Authority.

(v) Less Industry-academic Interaction

The scope for industry-academic interaction is limited as there are not many large scale industries. This also has lead to the problem of decreased campus placement of students.

(vi) Less Sports Infrastructure

The sports infrastructure at the Goa University is not up to expected level. University does not have a well developed cricket ground, hockey ground, volley ball court, tennis court etc.

(vii) Lack of funds for research

No sufficient start up grant for new faculty to kick start his/her research. Lack of funds for travel support (national and international) for attending conferences. No institutional mechanism, infrastructure and facilities for attracting international students.

Opportunities:

(i) Employment Opportunity

Since Goa has a dominant tourism sector, there is ample scope for self employment in tourism sector. There is huge self employment opportunity for commerce, management and computer based post graduates. Pharmaceutical industries, mining industries etc, provide opportunity of employment for science post graduates.

(ii) Opportunity to attract Female Students

Female-male ratio is high in Goa compared to many other states. In Goa, there is no gender discrimination in terms of access to/providing higher education.

(iii) Opportunity to Attract Foreign Students

Due to the English language advantage, it is possible to attract large number of foreign students. Goa University has a unique 'Study India Programme' in which students from Nihon University, Japan visits Goa University for about six months and students from Goa University visits the Nihon University in return. There is scope to extend this programme to other universities / country as well.

(iv) Opportunity to Attract Good faculty

Goa being a peace loving place and cosmopolitan in nature, can attract highly qualified faculty from the leading institutions in India.

(v) Visiting Professors

The brand name of Goa as major tourist destination, peaceful nature, can attract eminent persons as visiting professors and can make use of their expertise.

(vi) University has a spacious campus.

Potential for expansion of Goa University is immense as it has got large land area suitable for planning a world class campus.

Threats:

(iii)

(i) Slowdown of the economy

Slowdown of the Goa's economy due to the stoppage of mining is major threat to Goa University. It may reduce the state funding to Goa University and it may reduce the employment opportunities as well.

(ii) Difficulty in finding suitable candidates as faculty members Qualified candidates with required API are not available for higher academic posts. There is difficulty in finding suitable candidates from reserved category

Mushrooming of private institutions with false promises

as faculty members for the posts reserved for them.

Many private institutions are coming up with many promises. Students may be lured to these institutions expecting quick returns and University may lose good students.

(iv) Timely delivery of Policy initiatives

The formulation and announcement of Govt. Policies on issues of prime importance always get delayed. For example, industrial policy, Investment policy, etc. don't come in time. It affects the employability of the graduates.

(v) Failure to attract scholars for full time research

At the moment, majority of research scholars are part time researchers. University could not attract full time research scholars in big numbers to provide a boost to fundamental/cutting edge research. This affects the research output and quality of publications.

(vi) Low placement

Goa does not have large scale industries which can provide employment to all its educated manpower. Labour absorption capacity of Goa's industries are very low. It has affected the placement of students in many courses including professional courses.

2.3.1 Based on SWOT analysis, the "Strategic Plan" developed for institutional development.

Goa University's strategy for the remaining plan period rests on the guiding principles, namely, access, equity and excellence.

Strategic Plan Towards Enhanced Access to Higher Education

A plan strategy based on certain targets will be more meaningful and fruitful. A target based approach can yield better results. The University keeps the target of GER 35% at the end of 12th plan and 40 percent at the end of 13th plan for the State. The strategy of Goa University is to increase student intake not only by introducing new courses and programmes but also by expanding the existing programmes through investment in infrastructural facilities and other basic requirements

The strategic plan lays emphasis on:

(i) Expanding classroom and lab space

The existing space is not sufficient for introducing new and relevant courses and programmes and to expand the existing programmes. The existing class rooms are designed to accommodate just 30 to 35 students on average. To introduce interdisciplinary and multidisciplinary programmes, we require class rooms of large size. It also necessitates more lab space, space for ladies room, gents common room, etc.

(ii) Expanding hostel facilities

At the moment, the University has only 3 functional student hostels. The hostel facility is inadequate to meet the growing demand. If we have to attract more number of students from remote places of the State and also from other places, the hostel facility has to be enhanced. Some programmes like MBA,

MCA etc. have to be residential one to enhance student centric teaching-learning process.

(iii) Recruitment of more faculty

Shortage of faculty is a major constraint in the way of access to higher education. More than 35 percent of the total sanctioned positions remain unfilled. As the existing faculty strength can't even manage the ongoing academic programmes in a flexible way, there is no opportunity to start new programmes or plan new initiatives.

(iv) Expanding library facilities

Though the Goa University library is quite good compared to other established Institutions and is one of our greatest strengths, there is urgent need for further improving the library facilities by considering the contemporary requirements., The subscription of journals, data bases, e-resources and magazines has to be increased. The seating capacity and rack facility of library has to go up. At the moment, even maintaining the existing facility is a challenge by considering the huge infrastructure and human resource constraints.

(v) Expanding computer facilities, provision of teaching aids, audiovisual facilities.

Enhancing access to quality higher education means providing opportunity in terms of higher access to computer facilities, teaching and audiovisual aids. The existing facilities in the computer labs have to be increased. The class rooms are to be equipped with modern amenities/equipments to facilitate teaching learning process.

(vi) Transport facilities for students who commute every day to campus and back.

The public transport system is relatively poor and not dependable specially to student community in Goa. There is a need to provide at least skeletal transport facility from the Panaji city to the University campus to enable the students to reach the class room in time. Similarly, the students staying on the campus are also facing problem as they have to walk long distances to reach

their respective places of learning. Consequently, there is a urgent need to provide intra-campus transport facility to such residents.

(vii) Research fellowship for fulltime students.

To create a research culture in the University, more number of fulltime research workers are needed and quality could be attracted only through liberal incentives in the form of decent research fellowships to aspiring candidates.

Strategic Plan Towards More Equity

A well researched strategy to bring down disparity across geographical regions, gender and socio economic and socio religious groups is of utmost significance in overall development of higher education. The ideal strategy is to provide required facilities to the above groups in terms of physical infrastructure, financial support and special learning opportunities. In order to ensure equity the strategic plan lays emphasis on:

- (i) Constructing a hostel exclusively for SC, ST and OBC students or 50 percent of accommodation is reserved for SC, ST, OBC students.
- (ii) Attractive scholarship schemes for SC, ST, OBC and other economically deprived sections of the society.
- (iii) Girls hostels with enhanced capacity.
- (iv) Common rooms and other facilities for girl students.
- (v) New academic courses / programmes on gender related issues, for example,M.A in Gender and Development, Women's Studies etc.
- (vi) Design new learning processes / pedagogy etc which help the weaker students..
- (vii) Transport facility specially for SC, ST and OBC students.
- (viii) Special coaching for NET/SET exam for SC, ST and OBC candidates.
- (ix) Hostel mess subsidy to students from economically weaker sections and socially deprived class.

Strategic Plan Towards enhancing Excellence in Higher Education

In the long run, excellence can be made possible/achieved through enrichment of competent faculty. Excellent faculty leads to excellent students and yield overall academic excellence. In Goa, since GER is relatively high, and the State is placed in a relatively better position with regard to access and equity, we can afford to give more emphasis on quality. The strategy should be to incentivize the existing faculty and students to undertake quality research along with the upgradation of infrastructure as mentioned earlier. The following steps are aimed in this direction:

- (i) Provision of seed money / research grants for the faculty to undertake research.
- (ii) Provision of funds for presentation of research papers in National/ International conferences and gatherings.
- (iii) Grants for publication of books, submission of papers in journals, filing patent applications etc.
- (iv) Research fellowship for full time Ph.D students.
- (v) Expansion of Visiting Professorship Scheme.

2.3.2 How the key activities proposed in the Institution Development Proposal are linked with the results of SWOT Analysis.

The activities under Institutional Development Plan are mainly categorized into four types.

- (i) Infrastructural Development
- (ii) Faculty Support and Development
- (iii) New Courses and Programmes
- (iv) Research, Development and Innovation.

Sl No.	Proposals	Link with SWOT Analysis
1	Infrastructural	One of the major weaknesses of Goa University as per the
	Development	SWOT analysis is the infrastructure constraint in terms of
		class room space, lab space, central instrumentation space

		facility, library space, common room space, recreational
		space, equipments, computers, etc. Goa university has
		enormous strength to increase the access, equity and
		excellence in higher education provided adequate
		infrastructure is available.
2	Faculty Support	Another major weakness of the Goa University is that all
		faculty positions are not filled. It is very unlikely that
		University will be able to fill all the vacant positions soon.
		Faculty support in terms of new recruitment could go a
		long way in enhancing the teaching and research output of
		the University.
		Besides, support to existing faculty is also proposed in the
		plan to extract full potential from them
3	New Courses and	Major strength of the University is the low student teacher
	Programmes	ratio. Along with plans for expanding existing
		programmes and courses, new programmes and courses
		have been proposed in the plan to provide more access
		and equity. University plans for a 25% increase in
		students intake by the end of the 12 th plan and 50%
		increase by the end of the 13 th Plan.
4	Research,	Major strength of the University is the highly qualified
	Development and	faculty members with high research potential. The Plan
	Innovation	contains proposals on innovative and research centric
		programmes, which would utilize this potential.

2.4 Objectives and Expected Results

The specific objectives of the Plan include increasing employability of graduates, increased learning outcomes of the students, improving interaction with industry, enhancement of research and consultancy services, etc.

(a) Action Plan for Improving Employability of graduates.

The IDP of Goa University has proposed to introduce few new job oriented courses like new PG Diploma Programme in "Plant Based Industrial Applications", integrated Ph.D programme in material science, a Diploma Course titled 'Microbial Quality Control and Process Management', PG Diploma programme in "Applied zoology", an additional batch of MBA course is envisioned by the Management Department of the University. Besides, there are proposals for improving infrastructure in general and for the purchase of equipments/ instruments, etc. These instruments/facilities would improve the skills of the students and hence increase their employability. The Commerce Department proposes to set up finance lab and SSCCF lab proposes to buy new statistical software. All these initiatives should enhance the employability ratio of the graduates. Faculty of languages also propose to start new programmes that would improve the language skills of the graduates and their employability.

(b) Increased Learning Outcomes of the Students

The proposal is also aimed at improving the learning outcomes of the graduates. Many Science Departments have proposed to increase lab space and the purchase of new equipments/ instruments. This is going to provide the graduates more practical knowledge based on experimentation and better learning outcomes. The new courses proposed in the IDP are mostly applied courses that has industrial application and is expected to improve the learning outcomes. The proposal from the Sociology Department and Computer Science Department on digital story telling is a new experiment to improve the learning outcomes.

- c) Obtaining Autonomous Institution Status within 2 years NA
- d) NA

(e) Implementation of Academic and Non- academic Reforms

Goa University has decentralized its administrative responsibilities in order to initiate reforms and delegated administrative powers/authority to the level of Faculty Deans and

the Heads of the Departments. The Department Council at the Department level is a basic decision making unit and most of the academic decisions pertaining to day to day functions are taken at this level. Heads of Departments are also entrusted with limited financial powers to enable them to take timely decisions /fulfil department requirements. Goa University is far ahead of other State Universities with regard to examination reforms. Goa University has introduced a fully internal assessment system and is able to complete the assessment and announce the marks /show the assessed answer papers to the students within three days of completion of final examination. Goa University also follows continuous evaluation system as part of its Choice Based Credit System. University will try to strengthen all the good academic and administrative practices existing at the moment and thrive to add few more in the days to come. This IDP proposed an integrated management system by the computer center that would help speedy processing of files/administrative matters.

(f) Improving Interaction with Industry.

The IDP contains proposals on programmes which require direct interaction with the industry. The proposals from Departments of Botany, Microbiology, Zoology, Commerce, etc. are going to improve the University- Industry interaction. Sophisticated equipments / state-of the –art laboratory facility / quality driven Faculty proposed under this IDP is likely to attract industry personnel into the campus for various types of technical assistance. Campus development programmes like rainwater harvesting will enhance the scope for consultancy from the industry to start similar projects.

(g) Enhancement of Research and Consultancy Services

In general, the proposals are aimed at up gradation of lab, equipments, student and faculty resource etc, and consequently, these facilities/steps are going to bring more research projects and consultancy services. Majority Faculty members from science disciplines already have good track record of undertaking research projects and consultancy assignments. The IDP once implemented will make rapid progress in research and consultancy services.

2.5 Provide action plan for organizing a finishing school and for improving the academic performance of SC/ST/OBC and academically weak students.

We have a plan to organize finishing school for job oriented Post Graduate Courses like MBA, MCA, etc. at least once in a year. In order to improve the performance of academically weak SC/ST/OBC students, remedial classes will be organized.

Besides, an innovative scheme of "Adopt an SC//ST/OBC Student" will be introduced in this plan period on an experimental basis. Under this scheme the faculty members of the respective departments will adopt academically at least one SC/ST/OBC student and monitor their academic performance and help them to overcome their difficulties.

Special Coaching for NET/SET Examination: Qualifying in NET/SET examination has become a difficult task for the students. Employability of SC/ST/OBC students in the academic institutions depends on whether they pass NET or SET Examination. There are many teaching positions in the colleges and in the University remaining vacant at various levels for want of qualified candidates from the reserved category. We plan for special NET/SET coaching for SC/ST/OBC/Physically Handicapped students twice in a year.

2.6 Provide an action plan for strengthening of PG Programmes and starting of new PG programmes.

The IDP proposals give details on strengthening of existing PG programmes and starting of new PG programmes.

2.7 Attach a summary of Training Needs Analysis carried out. Also, provide Faculty development Plan for the first 18 months for improving their teaching, subject area and research competence based on Training Needs Analysis.

On an average, Goa University has about 5 teachers per department. The number of Departments/Centres on Campus is about 28.As such, the approximate number of Faculty works out to 140. Thus the ratio of Professor: Associate Professor: Assistant Professor works out to 1:2:2. However, the actual number of Professors (P) has grown proportionately higher due to the continual cycles of Career Advancement Scheme

(CAS). Likewise, the number of Associate Professors (Asc.P) has also increased in proportion. However, due to non filling of vacant positions at the entry level during the past few years, the number of Assistant Professors(Ast.P) has remained much lower.

Taking all these facts, into account, for the purpose of this analysis, the ratio of the teachers in these 3 categories is assumed to be approx. 56:56:28.

The training need analysis was carried out using the information from (i)Feed-back forms of Faculty (ii) Self Evaluation Reports of Individual Departments (iii) Data Available with IQAC (iii) Data Published in the Annual Reports of the University (iv) Self-Appraisal Forms of the Individual faculty. The criteria used to assess the basic and advanced Pedagogy included (i)subject knowledge (ii) teaching efficacy (iii) Soft skills (iv) approachability (iv) class room management.

Action visualized by the University for enhancement of pedagogic competence are(i)A week-long on- Campus initiation programmes for new entrants in teaching (ii)UGC Orientation programme within a year of joining(iii)Impart Moodle-training to new entrants in teaching

Specific action visualized by the University for enhancement of Pedagogic competence, domain knowledge enhancement, faculty qualifications, research capabilities, etc, are(i) A Compulsory Refresher Course within 2 years of joining (ii) Summer Schools of approx. weeks duration (iii) Short Term Advance Training Courses (subject specific) (iv) Short Term Need-based courses in new/developing areas (v) Incentivizing Quality publications (vi) Encouraging Faculty-conducted programmes /conferences/workshops (vii) Encourage comfort-level with the use of ICT (viii) Provide on-line pedagogical competence to the willing faculty (ix) Enhancing grants for purchase of books/subscription of periodicals (x) Speedy processing of Faculty Improvement Programme (FIP) proposals (xi) Extending the Study-Leave facility to a larger percentage of the faculty (xii) Granting fellowships for short-term visits/research proportionately across Faculties (xiii) Encourage faculty to undertake Post-doctoral research (xiv)

Encouraging inter-institutional collaborative research ventures (xv) Motivating faculty to undertake research projects from funding agencies.

FACULTY DEVELOPMENT/TRAINING PLAN FOR 1ST 18 MONTHS

Planned Activity	Professors	Assoc. Profs.	Asst. Profs.
1-week Campus Initiation			1 st three weeks of June,
programs			2014 Facultywise batches
Need-based week-long	1 st fortnight of June	1 st fortnight of	1 st fortnight of June 2014
Moodle-trg. Prog	2014	June2014	
On Campus Soft-skill	Bet Dec14-June 15 (by	Bet. July-Dec.2015	June-July 2014
Advancement prog. (2-5	choice)	(by choice)	
days)			
Need based Short Term	Bet JanJune2015	JanJune15	NovDec.2015
Subject-specific Advanced			
Trg. Course			
Summer School	Bet. April-June 2015	Bet. AprJune	Bet. AprJune 2015
		2015	
Need based Short Term	July-Dec 2015	July-Dec 2015	July Dec.20 15
course in New/dev. Areas			

2.8 Action Plan for Technical and other Staff in Functional Areas.

- I. Training of Technical Staff in advanced/state-of-the-art areas /equipment for:
 - A. Chromatography.
 - B. Spectroscopy.
 - C. Microscopy (including AFM).
 - D. Molecular biology techniques.
 - E. Others.
 - (a) Training in instrumentation and expertise for use of state-of-the-art equipments.
 - (b) Training in instrument applications for biological, physical and chemical sciences.
- II. Training of Teaching Faculty/Research Staff in advanced/state-of-the-art areas of A to E above.
 - (a) Training in instrumentation and expertise for use of state-of-the-art equipments
 - (b) Training in instrument applications for biological/physical/chemical sciences.
- III. Training/Refresher Courses/Workshops for Administrative/Non-teaching Staff.
 Training for the purpose of enhancing efficiency and output, public relations / interaction, work code and ethics, aiming at developing overall professionalism.

The above training programme will be undertaken during the plan period.

2.9 Describe the relevance and Coherence of Institutional Development Proposal with State's/National Industrial/Economic Development Plan.

The Institutional Development Plan has been prepared keeping in mind the Industrial Policy/ Economic Policy of Goa Government. The Goa Government has always encouraged service-sector-oriented growth strategy for the economic development of the State. The State Government has also taken initiative towards industrial development. The contribution of Industrial sector to Goa's economy is close to 30%. As such, the Institutional Development Proposal of Goa University is intended to increase the employability of the graduates both in the Service sector and Industrial sector. The programmes proposed by the various Departments are such as would meet the Human Resource (HR) requirements of both the Service as well as the Industrial sectors of Goa's Economy.

2.10 Describe briefly the participation of departments/faculty in the IDP Preparation.

The Departments of Goa University have actively participated in the IDP preparation. The IDP of Goa University contains 27proposals which came from different Departments/ Divisions. This fact by itself is a reflection of the active involvement of the Departments and faculty in the IDP. The University has ensured the participation of all the Departments through a well-designed structure of Plan preparation. The Hon'ble Vice -Chancellor held meetings with the Deans of Faculties on the preparation of IDP and the Deans in turn had brain-storming sessions with the Heads of Departments and the Members of the Faculty Boards. The Heads of the Departments, on their part, convened several Departmental Council meetings to prepare the Departmental Plans. The University also constituted a Planning Team to co-ordinate and assist in the activities pertaining to the Plan preparation. The Planning Team met frequently in order to arrive at a Draft Plan. Moreover, the

Planning Team also interacted with the Deans, Heads of Departments, faculty members and administrative staff in the process of Plan preparation.

2.11. Describe the institutional project implementation arrangements with participation of faculty and staff.

University has already constituted a Project Monitoring Committee to monitor the Institutional Project at the implementation level under the chairmanship of Hon. Vice-chancellor as per the recommendation of RUSA involving senior faculty, administrative officers, student representatives etc. University will be also constituting additional committees if required like the Infrastructure Committee, R &D Committee, Academic Support Committee, Faculty Development Committee, Institutional Reforms Committee, etc, to monitor the Project at the implementation levels specific to the areas of RUSA funding.

2.12 Institutional Project Budget.

The Institutional Project Budget is given in **Table 2.12**. The summary of the aggregate Budget figures of all the proposals from all the Departments concerned are presented in the Tables below in two formats: (i) Component-wise for the 6 components; and, (ii) Year-wise for 2014-15, 2015-16 and 2016-17.

Institutional Budget Table 2.12: Component-wise(Summary of Table 2.12 of **RUSA**)

Sl. No	Faculty/Dept.	Propos al	1	2	3	4	5	6	Total (Rs
1	Faculty of L &L	No P1	1.67	1.50	0.33	0.315	0.81	0.18	Crores) 4.81
2	SS Faculty	P2	0.20	0	0	0	0	0	0.20
3	SIP	P3	0.24	0	0	0	0.08	0.15	0.46
4	SS Fac& Comp. Science	P4	0.80	0.36	0.37	0	0.35	0	1.88
5	Earth Science	P5	0.795	0	0	0	0	0	0.795
6	Physics	P6	1.57	0.33	0.38	0.708	0.42	0	3.40
7	Botany	P7	1.47	0.09	0.09	0	0.35	0	2.00

8	Microbiology	P8	2.29	0.60	0.95	0.1	0.25	0	4.19
9	Marine Science	P9	1.95	2.19	0	0	0.19	0	4.35
10	Zoology	P10	3.72	0.545	0.07	0.149	0	0	4.49
11	Commerce	P11	4.45	2.37	0.29	0.05	2.34	0.49	10
12	Management.	P12	6.25	0.09	0.30	0	6.17	0	12.81
13	Sports	P13	0.32	0.03	0.06	0.03	1.26	0	1.70
14	Admn. (NT)	P14	0	0	0	0	0	0.04	0.040
15	Estate Div.	P15	7.95	0	0	0	0	0	7.95
16	Comp. Centre	P16	6.92	0	0	0	0	0	6.92
17	Library	P17	7.00	0	0	0	0	0	7.00
18	All Depts.	P18	1.50	0	0	0	0	0	1.50
19	Faculty of Nat. Science	P19	2.96	25.41	0.84	0.415	8.96	9.95	48.5
20	Estate Div.	P 20	13.6	0	0	0	0	0	13.6
21	All Depts.	P 21	0	0	0	0	0	3.24	3.24
22	All Depts.	P22	0	0	5	0	0	0	5.00
23	All Depts.	P23	0	0	5	0	0	0	5.00
24	Faculty of L &L	P24	1.75	0.015	0.05	0	0.06	0.05	1.91
25	Biotech	P25	2.24	0.75	0.10	0	0.05	0	3.14
26	Faculty of S E	P26	11.37	0.90	0.75	0.36	4.5	0	17.88
27	Sports Section	P 27	1.05	0	0	0	0	0	1.05
	Total		82.065	35.18	14.58	2.127	25.79	14.1	173.82

^{*}Components: 1) Infrastructure 2) R&D 3) Faculty improvement 4) Institutional Reforms 5) Academic Support 6) Others

Institutional Budget **Table 2.12**:**Year-wise**(Summary of **Table 2.12 of RUSA**)

Sl No.	Faculty, Department, Division	Proposal No.	2014-15	2015-16	2016-17	Total Plan Period
1	Faculty of Lang &Literature	P1	1.88	1.415	1.51	4.805
2	SS Faculty	P2	0.13	0.07	0	0.20

	[G.] T 1 D					
3	Study India Programme	Р3	0.315	0.075	0.075	0.465
4	SS Faculty & Comp Science	P4	0.70	0.57	0.61	1.88
5	Earth Science	P5	0.165	0.35	0.280	0.795
6	Physics	Р6	1.00	1.389	1.014	3.403
7	Botany	P7	0.68	0.73	0.59	2.00
8	Microbiology	P8	2.03	1.28	0.88	4.19
9	Marine Science	Р9	1.35	1.5	1.5	4.35
10	Zoology	P10	1.5	1.5	1.49	4.49
11	Commerce	P11	3	4	3	10
12	Management.	P12	6.3285	3.3256	3.1389	12.793
13	Sports	P13	0.19	0.76	0.75	1.70
14	Admn. NT	P14	0.020	0.010	0.010	0.040
15	Estate Div.	P15	2.65	2.65	2.65	7.95
16	Computer centre	P16	4.558	2.198	0.048	6.80
17	Library	P17	3.28	1.86	1.86	7.0
18	All Depts.	P18	0.50	0.50	0.50	1.50
19	Faculty of Natural Sc	P19	27.16	11.88	9.46	48.5
20	Estate Div.	P 20	5.00	5.00	3.60	13.6
21	All Depts.	P 21	1.08	1.08	1.08	3.24
22	All Depts.	P22	2.00	2.00	1.00	5.0
23	All Depts.	P23	2.00	2.00	1.00	5.0
24	Faculty of L &L	P24	1.00	0.37	0.38	1.75
25	Biotech	P25	1.56	1.135	0.445	3.14
26	Faculty of Sc& E	P26	8.17	8.19	1.02	17.88
27	Sports Section	P 27	0	0.525	0.525	1.05
	Total		78.2465	56.3626	38.4159	173.821
	l	1		I	1	

Classification of Proposals Under Different Components

1. Proposals Under Component 3, Infrastructure.

SI	Departments	Proposal	Infra	R&D	Faculty	Inst.	Academic	Others	Total
No.		No.			Devept.	Reforms	Support		Rs
			1	2	3	4	5	6	crores
1	SSCCF LAB	P2	0.2	0	0	0	0	0	0.2
2	SIP	Р3	0.24	0	0	0	0.075	.15	0.465
3	Sports	P13	1.05	0	0.	0.	0	0	1.05
4	Estate Div	P15	7.95	0	0	0	0	0	
	(CampusDevpt)								7.95
5	Computer	P16	6.92	0	0	0	0	0	
	centre								6.92
6	Library	P17	7	0	0	0	0	0	7
7	All Depts	P18	1.5	0	0	0	0	0	1.5
8	Earth Science	P5	.795	0	0	0	0	0	0.795
	Total		25.655	0	0	0	0.075	0.15	25.88
	Waiting List								
1	Estate Div	P 20	13.6	0	0	0	0	0	
	(Hostel)								13.6
	Total								
	Including (W/L)								39.48

2. Proposals Under Component 9, Equity Initiatives

SI	Departments	Proposal	Infr	R&D	Faculty	Inst.	Academic	Others	Total
No.		No.			Devpt	Reforms	Support		RsCrores
1	Sociology &	P 4	0.8	0.36	0.37	0	0.35	0	
	Computer Sc								1.88
2	All Depts	P21*	0	0	0	0	0	3.24	3.24
	Total		0.8	0.36	0.37	0	0.35	3.24	5.12

^{*}Ph.D scholarship to SC/ST/OBC/Minorities/women

75 Ph.D scholarships at rate of Rs 12,000 per month for 3 years

3. Proposals Under Component 11, Faculty Improvement

SI	Departments	Proposa	Infr	R&D	Faculty	Inst.	Academic	Others	Total
No.		1			Devpt	Reforms	Support		
		No.							
1	All Depts	P22	0	0	05	0	0	0	05
2	All DePts	P23	0	0	05	0	0	0	05
	Total		0	0	10	0	0	0	10

4. Proposals Under Component 13, Admn. Staff Training

SI	Departments	Proposal	Infr	R&D	Faculty	Inst.	Academic	Others	Total
No.		No.			Devpt	Reforms	Support		Rscrores
1	All Depts	P14	0	0	0	0	0	0.040	0.040
	Total		0	0	0	0	0	0.040	0.040

5. Proposals Under Component 8, Research, Innovation, etc.. (Maximum Available 120 Crores)

SI	Departments		Infrst.	R&D	Facult	Inst.	Academi	Others	Total
No.					У	Refor	С		Rs
					Devpt.	ms	Support		Crores
1	Faculty of L & L	P1	1.67	1.5	0.33	0.315	0.81	0.18	4.805
2	Physics	P6	1.57	0.33	0.375	0.708	0.42	0	3.403
3	Botany	P7	1.47	0.09	0.09	0	0.35	0	2.00
4	Microbiology	P8	2.29	0.6	0.95	0.1	0.25	0	4.19
5	Marine Science	P9	1.95	2.19	0	0	0.19	0	4.35
6	Zoology	P10	3.72	0.545	0.07	0.149	0	0	4.49
7	Faculty of Commerce	P11	4.45	2.37	0.29	0.05	2.34	0.486	10.8
8	Faculty of Management	P12	7.05	0.09	0.3	0	6.166	0	12.8
9	Faculty of Nat	P19	2.96	25.41	0.84	0.415	8.96	9.95	48.5

	Science								
10	Faculty L & L	P24	1.75	.015	.045	0	.06	.045	1.91
	(Marathi)								
11	Biotech	P25	2.24	0.75	0.10	0	0.05	0	3.14
12	Faculty of SE	P26	11.37	0.90	0.75	0.36	4.5	0	
									17.88
13	Sports	P27	0.32	0.03	0.06	0.03	1.26	0	1.70
	(Ground)								
	Total		42.015	34.82	4.208	2.127	25.356	10.66	120

2.13 Provide the targets against the deliverables as listed below

Indicator	Weightage	Present Rating	Present Score	Target Rating	Target Score
GOVERNANCE QUALITY INDEX - 16%	16%		13.15		13.75
% of Faculty Positions vacant	2.0%	34%	1.75	10	1.90
% of Non-permanent faculty 4.0%	4.0%	19%	3.75	5	3.95
% of Non-teaching staff to teaching Staff	3.0%	300%	3.00	300	3.00
Total no of under graduate programs	1.0%	0	0	0	0
Total no of post graduate programs	1.0%	32	.95	40	1
Total no of doctoral programs	1.0%	24			
Faculty appointment - turn around/cycle time in months	2.0%	8	1.70	4	1.90
Delay in payment of monthly salary payment Of faculty	2.0%	0	2	0	2
ACADEMIC EXCELLENCE INDEX - 21.5%	21.5%		20.10		21.15

Delay in exam conduction and declaration of results	3.5%	0	3.5	0	3.5
Plagiarism Check	1.0%	Yes	.95	Yes	1
Accreditation	4.0%	Yes	3.75	Yes	3.95
Teacher Student ratio	4.0%	1:19	3.90	1:15	4
% of Visiting professors	1.0%	25	.95	3%	1
% of graduates employed by convocation	0.5%	<10%	.3	20	.45
% Number of students receiving awards at National and International level	0.5%	<1%	.25	2	.4
% of expenditure on Library, cyber library and laboratories per year	1.0%	4%	.90	5%	.95
Ratio of expenditure on teaching staff salaries to non-teaching staff salaries	1.0%	3:1	1	3:1	1
% of faculty covered under pedagogical training	1.0%	100%	1	100	1
% of faculty involved in "further education"	0.5%	1%	.5	1%	.5
Dropout rate	1.5%	3.5%	1.40	3%	1.45
No of foreign collaborations	1.5%	02	1.2	10	1.45
Subscription to INFLIBNET	0.5%	Yes	.5	Yes	.5
EQUITY INITIATIVE INDEX - 12.5%	12.5%		11.58		12.5
SC Student%	3.0%	1%	2.75	1.5	3
ST Student%	3.0%	7%	2.5	10	3
Gender Parity	3.0%	2.8 (F/M)	2.98	1:30	3
Urban to Rural Student population	2.0%	60:40	1.85	50:50	2
Existence of CASH	0.5%	YES	.5	Yes	.5
Existence of Social Protection Cell	0.5%	YES	.5	Yes	.5
Language assistance programs for weak students	0.5%	YES	.5	Yes	.5

REASERCH AND INNOVATION INDEX - 24%	24%		18.2		21.4
Per-faculty publications (Per Year)	2.0%	1.25	1.75	1.5	1.95
Cumulative Impact Factor of publication	3.0%	420.89 (5 years)	2.5	600	2.75
H Index of scholars	2.0%	83 (5 years)	1.75	120	1.85
% of staff involved as principal researcher	1.0%	20%	.80	25%	1
% of research projects fully or more than funded by external agencies, industries etc	2.0%	90 to 95%	2	90-95%	2
Total no of patents granted	1.0%	03	.75	5	2
% of faculty receiving national/international Awards	1.0%	<0.5%	.2	.5%	.75
% of research income	1.0%	<1%	.80	1%	.90
Doctoral degrees awarded per academic Staff	1.0%	1.5 (3 Years)	.80	2	.90
% doctoral degrees in total number of degrees awarded	3.0%	5%	.75	8%	.90
% expenditure on research and related facilities	1.0%	5%	.75	8%	.80
Digitization of Masters and Doctoral thesis	0.5%	100%	.5	100	.5
UPE/CPE	3.5%	65%	3.10	75%	3.20
% of Income generated from non- grant sources	2.0%	23%	1.75	25%	1.9
STUDENT FACILITIES - 15%	15%		12.15		13.95
No of new professional development programs	1.0%	01	.75	3	1
Existence of Placement Cells and Placement Policy	1.0%	Yes	1	Yes	1

% of expenditure on infrastructure maintenance and addition	3.0%	8%	2.75	10	3
Availability of hostel per outstation female student	3.0%	Yes	2.5	300	2.95
Availability of hostel per outstation male student	2.0%	Yes	1.5	250	2
% of students on scholarship	2.0%	25%	1.90		2
Average scholarship amount per student	1.0%	Rs9200	.75	12000	1
Student Experience Surveys	1.0%	YES	1	Yes	1
Graduate Destination Surveys	1.0%	NO	0	0	0
Infrastructure and Others - 11%	11%		9.25		10.75
%Income generated from training courses	1.0%	<1	.5	1	1
% Income generated from consulting	1.0%	45.69 (Lakhs)	.5	1 crore	1
Infrastructural sufficiency	3.0%	60%	2.25	80%	2.75
Computer coverage	3.0%	100%	3	100	3
Internet connectivity of Campus	3.0%	100%	3	100	3
	100 %		84.43		93.5

ANNEXURE-1
SUMMARY OF THE PROPOSAL UNDER INSTITUTIONAL DEVELOPMENT PLAN

(P1, P2...... are the proposals numbers mentioned in the Table at 2.12)

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS
			CRORES)
P-1	INSTITUTE FOR MULTI-DISCIPLINARY	8	4.805
	STUDY, RESEARCH AND PUBLICATION	Research,	CRORES
		Innovation	CRORES

The Faculty of Languages and Literature proposes to establish an Institute of Collative Studies in Literature, Culture and Language to undertake diverse interdisciplinary studies, research, publication and assignments across Languages taught in the Faculty and prevalent in the State. Its long-term objectives include inter se the conduct of specific full-time PG level certificate /diploma and degree courses in various interdisciplinary / inter-lingual areas to enhance access to the deprived sections of society and provide greater inclusion to its marginal/rural segments. It aims at compiling, documenting, translating and interpreting the State's yet-to-be-compiled cultural heritage and historical data that is concealed in vernacular idiom and folk performances/practices. This is expected to enhance the skills and employability of the students. It also aims at achieving for itself an exclusive identity and visibility in the region and among peer institutions, across the country. The Institute proposes to have dual-subject as well as 3-language General M.A. programmes in addition to the regular single-subject PG programmes, in order to enhance the educational openings and employment opportunities for under-privileged students lacking single-language exposure/training. Furthermore, the Institute expects to undertake minor/major research projects in tandem with its objectives.

PROPOSA	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
L NO.			(IN RS
			CRORES)
P-2	UPGRADATION OF SOCIAL	3	0.20
· -	SCIENCES COMMON COMPUTER	Infrastructure	CDODEC
	FACILITY (SSCCF) LAB	iiiiiastiucture	CRORES

The SSCCF Lab is in existence for the last 13 years and is used by students and faculty of social sciences disciplines extensively for academic work. The proposal is to upgrade the lab by procuring a standard statistical software STATA and to furnish it to accommodate more number of students at a given time.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-3	UPGRADATION OF EXISTING FACILITIES (STUDY INDIA PROGRAMME)	3 Infrastructure	0.465 CRORES

Summary:

Goa University has a Study India Programme, an exchange programme in which students from Nihon University, Japan visit Goa University every year. The students from Goa University also visit Nihon University occasionally. There is growing demand from Japanese students to visit India under this programme. However, due to shortage of class room space, Goa University could not meet this demand. The proposal is to create a large and better class room space for the said Programe.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-4	PLATFORM FOR ACTIVE LEARNING (PAL)	9	1.88
			CRORES

PAL will create a real and virtual student-active and interactive classroom. It will be a multi modal, multimedia, multilingual cross-disciplinary platform. Through the output of knowledge artefacts the differences in social backgrounds are amplified and less privileged groups experience more voice and empowerment. The added technology skills and communication skills will help improve both their employment and life options and capacities.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-5	CAMPUS DEVELOPMENT	3	0.795
	GROUND WATER HARVESTING	Research,	CRORES
		Innovation	

Summary:

Ground Water Harvesting is aimed at generating a self sufficient and sustainable water supply system in the Goa University campus while ensuring sufficient scope for learning and imparting practical knowledge to the student community and stake holders. It is expected to provide an opportunity for generating consultancy projects on the subject. Goa University is in the forefront in respect of rainwater harvesting and ground water recharging from the last seven years.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-6	CENTRE FOR MATERIAL SCIENCE	8	3.403
		Research,	CRORES
		Innovation	

Department of Physics proposes to start a Centre for Material Science with a 5-6 year integrated Ph.D programme in material science. It is an interdisciplinary programme with the involvement of Department of Chemistry and Department of Electronics. It is a mission to generate human resource of excellent quality.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-7	PG DIPLOMA PROGRAMME IN PALNT BASED INDUSTRIAL	8	2.00
	APPLICATIONS.	Research, Innovation	CRORES

Summary:

The Department of Botany proposes a new PG Diploma Programme in "Plant Based Industrial Applications". It is a new employment oriented Programme in collaboration with industries and is expected to provide opportunity to learn from industries and work with them. It proposes to extension of laboratory space for the whole faculty of life sciences and environment. It also plans for establishment of a computer centre and procurement of furniture.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-8	MODERNISING NEW LABORATARIES AND TO BUY NEW INSTRUMENTS	8 Research, Innovation	4.19 CRORES

This proposal from the Department of Microbiology is mainly to modernize laboratories and buy new instruments. It also plans to start a Diploma Course, 'Microbial Quality Control and Process Management'. This is an employment oriented course and expects to increase the employability of students. The Department also plans to provide training for faculty and staff to enhance the learning experience of the students.

PROPOSAL NO.	PROPOSAL NAME	RUSA COMPONENT	AMOUNT (IN RS CRORES)
P-9	UPGRADATION OF LABORATARY, MODERNISATION OF CLASSROOM, INCREASE STUDENTS INTAKE	8 Research, Innovation	4.35 CRORES

Summary:

To increase the quality production of human resource in different specialization of marine sciences and increasing the number of seats to 25.Plan proposes to have good modern spacious laboratories (4 numbers), 1 clean laboratory for 10 students, wet lab and museum. Modernization of classroom 1 for 30 students and seminar hall with modern amenities for 50 student capacity.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-10	MODERNISATION OF	8	4.49
	LABORATRIES, DIPLOMA IN APPLIED ZOOLOGY	Research,	CRORES
	APPLIED ZOOLOGY	Innovation	CRURES

This is a proposal from the Department of Zoology. The proposal is to modernize laboratories over the period for the next three years. It also proposes upgradation of the existing equipment and procurement of new sophisticated equipment for teaching as well as for research, to establish new classroom and new laboratory, to construct "continuous flow through aquarium room", modernization of class room and refurbishment of the existing "animal house". To enhance self-employability, proposes a new PG Diploma programme in "Applied zoology".

PROPOSAL NO.	PROPOSAL NAME	RUSA COMPONENT	AMOUNT (IN RS CRORES)
P-11	MODERNISED COMPUTER LAB WITH STATE- OF- ART- FINANCE LAB AND DATA BASES.	8 Research, Innovation	10.8 CRORES

Summary:

This proposal is from Commerce Department. It proposes good, modern, spacious laboratories that will enhance the learning outcomes. It plans to start new employment oriented programme in collaboration with industries thus providing opportunity to learn from industries and work with them. It plans for training for faculty and staff to enhance the learning experience of students. Since the Commerce is a dynamic subject, there is a need to constantly upgrade the subject knowledge and resent developments. To meet this requirement the Department has proposed Faculty Development Plan.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-12	ONE ADDITIONAL BATCH	8	12.80
	OF REGULAR MBA	Research,	CRORES
		Innovation	CNORES

An additional batch of MBA course is envisioned by the Management Department of the University as there is a good demand for the MBA programme from the students passing out of undergraduate programmes across the country. Secondly the Management is keen to start an Executive MBA as there is good demand for a part time Executive MBA programme. The Department also plan to start a Post Graduate Diploma in Women Entrepreneurship.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-13	M.P Ed Programme	8	1.7
		Research,	CRORES
		Innovation	CNUNES

Summary:

The main objective of the proposal is to renovate/ upgrade existing sports facilities. It is proposed to build a football playground, sport section building, new ground and to purchase new equipment and facilities. Sports section also plans for starting a new programme, i.e, Masters in Physical Education (M.P.Ed).

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-14	TRAINING OF NON TEACHING STAFF	13, Leadership Development	0.04 CRORES

Summary:

The main objective of the proposal is to provide training for administrative staff of the Goa University.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-15	RENOVATION/UPGRADATION	3	7.95
	OF EXISTING BUILDINGS, CAMPUS DEVELOPMENT ETC	Infrastructure	CRORES

This proposal from Estate Division of Goa University is to renovate/upgrade existing facilities of academic buildings, administrative building, canteen, Toilets and for campus development including beautification, amenities, water supply, drainage etc.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-16	UNIVERSITY DATA CENTRE,	3	6.92
1 10	UPGRADATION OF HARD	Infrastructure	
	WARE & SOFTWARE,	Initiastractare	CRORES
	CAMPUS NETWORK, SPACE		
	EXPANSION		

Summary:

This proposal is from the Computer Centre of Goa University. The Computer Centre proposes to have a conventional Data Centre in a separate premises which will have all kinds of professional features for the security of data. With the implementation of the IUMS, there will be a need to upgrade the hardware, software and other peripherals in the Computer Centre. It is proposed to construct a double storied building with 200 sqmt area to accommodate both the computer centre and Data Centre in the same location. It is also necessary to re-design the entire network in professional manner by laying afresh Optic Fibre, wherever needed, so that the services can be extended from a central hub.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-17	UPGRADATION OF UNIVERSITY LIBRARY	3	7.00
	UNIVERSITY LIBRARY	Infrastructure	CRORES

The proposal aims at upgrading the Goa University Library. The objective of the proposal is to develop a world class hybrid library that can provide access to academically relevant information to its users and serve as nerve centre for all academic activities in the campus. Proposal includes purchase of books, subscription to periodicals, purchase of e books and data bases, procurement of furniture and civil works.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-18	COMPUTERS AND	3	1.5
	TEACHING AID FOR ALL DEPARTMENTS	Infrastructure	CRORES

Summary:

All Departments and divisions require basic class room, office infrastructure for smooth working of academic and administrative tasks. The proposal is to acquire desktops/ laptops and other class room and office equipments for all the departments/divisions in the University.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-19	INFRASTRUCTURE, R & D, FACULTY DEVELOPMENT, FACULTY SUPPORT	8 Research, Innovation	48.5 CRORES

This proposal from the faculty of Natural Sciences covers all components of RUSA. The proposal is to improve infrastructure, Research and Development, Faculty Development, Faculty Support and a proposal to have a new building for the Department of Physics and Computer Science.

PROPOSAL NO.	PROPOSAL NAME	RUSA COMPONENT	AMOUNT (IN RS CRORES)
P-20	CREATION OF NEW FACILITIES CONSTRUCTION OF NEW HOSTEL FOR MEN AND WOMEN	3 Infrastructure	13.6 CRORES

Summary:

In order enhance access, equity and excellence, provision of residential accommodation is important. University proposes a 100-bedded hostel for men and 100-bedded hostel for women mainly to cater to high demand for hostel rooms from MBA and M.Com students.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-21	SCHOLARSHIP FOR SC/ST/OBC /MINORITIES AND WOMEN	9 Equity Initiative	3.24 CRORES

This scheme is proposed to provide scholarship for Ph.D students belonging to SC/ST/OBC/Minorities/Women/ Physically Challenged. The objective of this scheme is encourage the above category students to come forward to undertake full time research. 75 Ph.D scholarships at rate of Rs 12,000 per month for 3 years is proposed in this scheme. Though the scheme is proposed under equity component, it will have its impact on access and excellence.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-22	SEED MONEY TO UNDERTAKE	11	5.00
	RESEARCH BY FACULTY	Faculty	CRORES
		Improvement	CHORLS

Summary:

In order to encourage faculty to undertake research and publish in impact factor journals, a scheme of Seed Money for Research is Proposed. Under this scheme faculty members can avail a fixed sum for a fixed period subject to the terms and conditions of the scheme. Rs 5 cores is budgeted under this scheme.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-23	PARTICIPATION OF FACULTY IN NATIONAL /INTERNATIONAL SEMINAR/CONFERENCES	Eaculty	5.00 CRORES

This proposal is intended to encourage the faculty members to participate in national/international seminars /conferences /workshops so that the faculty members will get much needed exposure. This gives an opportunity for the faculty members to share their research findings with internationally renowned researchers and to get feed-back from them.

PROPOSAL	PROPOSAL NAME	RUSA	AMOUNT
NO.		COMPONENT	(IN RS CRORES)
P-24	FIVE YEAR INTEGRATED MASTERS PROGRAMME	8 Research, Innovation	1.91 CRORES

Summary:

To enhance employability, the Department of Marathi proposes a Five Year Integrated Master's Programme (Honours) and a Centre for Integrated Studies (CIS) under the auspices of Faculty of Languages and Literature at Goa University.

New job-oriented programme in collaboration with other universities will provide an opportunity to students. The Centre for Integrated Studies (CIS) will support student members by opening doorways to greater opportunities and rewards throughout the lifespan.

PROPOSAL	PROPOSAL NAME	RUSA COMPONENT	AMOUNT
NO.			(IN RS CRORES)
P-25	FIVE YEAR INTEGRATED MASTERS PROGRAMME (Biotechnology)	8 Research, Innovation	3.14 CRORES

This proposal is from the Department of Biotechnology. For strengthening of the M.Sc teaching and research programmes of Biotechnology, modern equipments are proposed. The proposal also aims at upgradation of computational facility for Bioinformatics teaching programme, for hands-on training for M.Sc students and for establishment of additional facilities in the laboratories to cater to the increased intake of M.Sc. students.

PROPOSAL NO.	PROPOSAL NAME	RUSA COMPONENT	AMOUNT (IN RS CRORES)
P-26	EXTENSION OF LIFE SCIENCE FACULTY BUILDING	8 Research, Innovation	17.88 CRORES

Summary

This is a proposal from the Faculty of Life Sciences and Environment. The proposal aims at extension of the new building to bring all the departments closer which will help in the interdisciplinary teaching and facilitate the students to opt for more courses from the different departments of this faculty. It is expected that the equipment utilisation will also be optimised as well as the research activities will be strengthened.

PROPOSAL NO.	PROPOSAL NAME	RUSA COMPONENT	AMOUNT (IN RS CRORES)
P-27	Foot ball Ground for the Sports	3	1.05
	Section	Infrastructure	CRORES

Summary

This is a proposal from the Sports Section. This proposal is to develop a new football ground, maintain the existing ground and to purchase sports equipments.