

UNIVERSITY OF PUNE



MASTER PLAN 2020

Environment + Equity + Education = Economics

Draft Outline of University of Pune Master Plan 2020 for responses and suggestions

April 12, 2006

**UNIVERSITY OF PUNE
MASTER PLAN 2020**

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Note: Pagination and final layouts will be completed upon receipt of suggestions, recommendations and inputs.

Detailed acknowledgements, credits and the profiles of participating stakeholders will be included in the final document.

MISSION OF EDUCATION

By Dr. A. P. J. Abdul Kalam
Hon. President, Republic of India

(Sourced from The Week, March 19, 2006 – Abridged and Abstracted)

Education is the most important element for growth and prosperity of a nation. India is in the process of transforming itself into a developed nation by 2020. Yet, we have 350 million people who need literacy and many more who have to acquire employable skills to suit the emerging modern India and the globe.

Also, we need to think specifically for our children who belong to weaker sections of society; they are undernourished and only a small percentage of them manage to complete eight years of satisfactory education, which is now a fundamental right of every Indian child. Can we allow the situation to continue in which millions of these children may be forced into lifelong poverty?

I propose to address the issues pertaining to education and suggest some solutions, which can be considered for implementation.

Inequality of access to educational resources

Unequal access to educational resources still exists due to a variety of reasons.

- Enlightened ones realise the importance of educating the young ones in the family at any cost and guiding them at all critical stages due to their economical well-being.
- There are those who might realise the importance of education but are not aware of the opportunities in time or the procedures and ways to realise these opportunities for their children.
- There is a category of families who are economically weak and do not realise the value of education, and hence, for generations together their children are neglected and continue to live in poverty.

How do we enlighten and create widespread awareness of education among all sections of society, particularly in rural areas and among urban poor?

Can we use technology for this important social purpose?

Is it possible for NGOs, other social and philanthropic institutions, the media, especially television and radio, to focus on this area of creating awareness?

Mobilising resources for the Mission of Education

Over the last 50 years, successive governments have been committed to achieving the national goal of universal education and have steadily increased the budgetary allocation for education. However, 35 percent of our adult population is yet to achieve literacy.

We have to generate additional resources because expenditure on education, whether at the Centre or in the States, can no longer be provided only by the respective ministries or departments. The mechanism should enable the persons to have freedom to innovate and deliver directly.

Admissions

The requirement is that the student should go to any school nearby and get a good and value-based quality education in that school without paying a huge sum of money.

Standardisation of teaching

The preferred school concept is arising because of differential quality and standards of teaching. There is a need to make the quality of teaching high in all schools. Provide an accelerated learning program using computer aids so that children can have a creative learning with the tools of creative animation through computers.

Planning for good education for the children in villages

Have you planned for something for children so that they can get good education in villages? We need to address this problem, which has multiple dimensions. It tells about the non-availability of infrastructural facilities in schools located in rural areas, the problems of syllabi followed in the school which is not the same as in the schools located in urban areas and the non-availability of quality teachers.

Integrating Syllabus with job opportunities and moral values

Job opportunities being national, there is a need for having a good and updated syllabus for all parts of the country and all types of schools for providing equal opportunities. The syllabus should be structured in such a manner that it should meet the changing societal needs, fulfil the needs of the occupation and inculcate high moral values among the students in addition to learning skills.

Delivery of quality education

The delivery of quality education is possible only through quality teaching. Some element of competitive rewarding is to be done based on performance. This competency has to be built up through a massive teachers education programme delivered through a continuously updated tele-education system.

Fundamental Needs

There is an urgent need that every school should have basic amenities such as good buildings equipped with ventilated, light, airy and spacious classrooms besides library, laboratories, safe drinking water, clean toilets, playground, the latest IT tools and infrastructure.

Understanding the Student

The goal needs to be achieved through the delivery of education in a manner which will take into account the socio-economic reality and perception of people to whom it is addressed. The aim of the education system should be to build character, human values, enhance the learning capacity through technology and build the confidence among children to face the future.

System of Entrance Examination

For entry into universities and professional colleges, we have to devise a common all-India examination to be conducted by a nominated institution of government. Also, the examination must be so designed that attending a coaching course does not provide undue advantage to privileged students. The Entrance test should be more in the nature of aptitude assessment rather than creating a seniority list.

The Vice-Chancellor's Foreword to the University of Pune's MASTER PLAN 2020

“Scholarship, Innovation and Creativity” are the Keywords of the University of Pune’s Master Plan 2020. The paradox of India’s poverty, increasing population and the inability of the public and private sector to provide for human wellbeing, and the nation’s commitment to a global agenda, along with the collective mandate for the Millennium Development Goals (MDGs), requires that the academic infrastructure be strengthened through exponential investments in paradigm changes and intellectual abilities to explore the requirements of a developing nation within the emerging 21st Century.

Trained and skilled human resources, educated on a platform of social equity and equal opportunities, will help fulfill India's vision of becoming a developed nation by 2020¹ by increasing the participation rate from the current 3 -4 % ² of the eligible. The University of Pune’s Master Plan would therefore need to encompass national objectives and strengthen commitments for social equity within the Vision 2020 document, with committed financial support.

Why should the very best, or the very rich, be able to get access to the best of education? Why should those who are unable to utilize the system’s advantages be denied the advantages of higher education? Dr. A. P. J. Abdul Kalam has emphasised that it is essential that academic infrastructure should be expanded and strengthened with a futuristic vision that includes the requirements of the nation’s social commitments and enables academic growth to help achieve the dream of a developed India by 2020.

I am therefore, presenting the initial document of the University of Pune’s Master Plan 2020 that includes the vision for strengthening the current Ganeshkhind Campus, proposes the Autonomous Campuses at Ahmednagar and Nashik, and takes the initiative to reassume the leadership role in academic growth in Pune through the proposed establishment of the International University Campus within Pune District at a suitable location.

This document has been prepared through a participatory effort of more than a thousand individuals from the University’s Family of Policy Makers, Administrators, Faculty, Employees, Staff, Students and Friends, including members of the Society.

Ratnakar Gaikwad, IAS
Vice-Chancellor
University of Pune

¹ Abdul Kalam, A. P. J. and Rajan, Y.S. *India 2020: A Vision for the New Millennium*. Penguin Books India, New Delhi, 1998

² Govt of India higher education site <<http://www.education.nic.in/htmlweb/higedu.htm>>

Mission

The University creates human resources of eminence to positively contribute towards the generation of knowledge and social commitment through *humanism and tolerance, for reason, for adventure of ideas, and for the search of truth*. The University would therefore seek to ensure the development of world-class education infrastructure, provide access to research-enabled learning, and integrate nation-building with personal wealth.

Vision

Strengthen the commitments of the University of Pune, its affiliated colleges and institutions towards ensuring recognition as an international leader in holistic education and ensuring vibrant, flexible and self-reliant institutional processes of higher learning along with an emphasis on value systems.

Provide equal opportunities and ensure support without prejudice for gender, class, caste and economic status to provide students with globally competitive education infrastructure compatible to the changing challenges of India's nation-building processes. Go beyond the recognised frontiers of social equity and justice and provide pioneering leadership action in bringing together the illiterate and the ignorant towards education.

Develop a comprehensive synergetic framework within the University, its affiliated colleges and institutions, of encouraging bright students based on merit and enabling scholarships by providing additional support systems to students with different-learning abilities.

Enable access to education processes and infrastructure through State-of-the-Art electronic computer-based technology to ensure that students are able to completely internalise perceptions of 21st Century accessibility to education administration and learning and productivity of intellectual perceptions.

Create a research-friendly environment amongst faculty and students in all departments and provide for proactive administrative, financial and infrastructure support through timely decisions and planning to enable internationally acclaimed research output and provide research-based learning.

Recognise the geographic justification of Pune in Western Maharashtra, and its close proximity to Mumbai, the financial capital of India, and the presence of an extremely strong industrial, entrepreneurial, financial and cultural establishments and traditions in the region. Develop strong linkages with the Public and Private Sector to ensure that these advantages are made available to the Students of the University of Pune, its affiliated colleges and institutions.

Introduction

About the University of Pune

Established on February 10, 1949, as a Regional University, the University of Pune has achieved the highest status of **Five Star Rating** from National Assessment and Accreditation Council (NAAC) and is among the first five Indian Universities with the “*Potential of Excellence*” status conferred by the University Grants Commission (UGC). Spread over 400 acres of land at Ganeshkhind in Pune, with unique architectural buildings and intellectual legacy, the University has grown in the shadows of big banyan and many other trees on the green campus. The Ganeshkhind Campus has forty-two Postgraduate departments, and interdisciplinary schools. Various national facilities such as IUCAA and C-DAC are present on the Campus.

Process of the Master Plan

The University of Pune's Master Plan Committee (UPMPC) was constituted by the Vice Chancellor by the Office Order dated March 13, 2006 (See Annexure). The UPMPC decided to adopt a participatory strategy to collate suggestions, proposals and ideas from the various stakeholders that comprise the University's Family. The interaction process included an initial briefing to all Members of the UPMPC, including various HoDs and Officers of the University. Various sub-groups were established, comprising members of Faculty, representatives of the Administration, Students and senior Academicians.

Workshops and discussion meetings were conducted within various departments along with a Principals' Collective Workshop at YASHADA that was attended by nearly sixty-five Principals of affiliated colleges of the University of Pune. Forty student-volunteers of the University of Pune's Management Sciences Department (PUMBA) underwent a one-day workshop at YASHADA in collaboration with the Planning Division of the Academy. These student-volunteers in turn established ripple-effect coordination with the members of Faculty of the UoP along with students of other departments.

Senior academicians, former Vice-Chancellors, the Municipal Commissioner and officers of the Pune Municipal Corporation, representatives of the private sector industry in Pune, management institutions, voluntary organizations and the UPMPC participated in discussion meetings to understand the perspectives of the Master Plan and provided valuable suggestions and recommendations to the initiative.

Thirty-five departments of the UoP have submitted detailed proposals to the UPMPC. The Academic Group has collated feedback from various members of Faculty and departmental committees, including students. Recommendations from all these initiatives have been included in the proposals of this document and where appropriate, have been presented, as submitted, in the annexures.

Spatial Components and Time-Schedule of the Master Plan

The existing Ganeshkhind Campus of the University of Pune has undergone phase-wise developments. The earlier spacious stone buildings have yielded space to RCC constructed buildings, including extensions to old buildings and newer buildings with modern amenities. Tragically, with the exception of the Main building, there is no common theme or style that can give a unique identity to the University. Over the past fifty-seven years, the academic departments have grown as also the numbers of students. Residential and other activities on the campus have increased significantly along with the academic and administrative needs.

This Master Plan 2020 document takes a renewed approach, with “*scholarship, innovation, and creativity*” and provides action pathways within a holistic approach. The convergence of strategic requirements for infrastructure, academic and social needs of future growth of the present campus, including (a) physical reengineering of the Ganeshkhind campus, (b) improvements for the Ranade Institute Campus, (c) strategies to strengthen the campuses at Ahmednagar and Nashik, (d) strengthen existing physical and academic infrastructure, and (e) create a new international campus in Pune District.

Ganeshkhind Campus Master Plan	International University Campus Plan	Affiliated Colleges & District Campuses
<ul style="list-style-type: none"> ▪ Campus Master Plan ▪ Academic Master Plan ▪ City Campus Plan ▪ Girl Students Village ▪ Market Laboratory ▪ University Bank 	<ul style="list-style-type: none"> ▪ Triumvirate of Premier Institutions similar to IIT, IIM & AIIMS ▪ Asian Consortiums for Education & Research ▪ Industrial Incubator 	<ul style="list-style-type: none"> ▪ UoP at Ahmednagar ▪ UoP at Nashik ▪ Girl Students Villages ▪ Sports Village ▪ Centres of Excellence at Affiliated Colleges

The Master Plan 2020 document proposes activities through a phase-wise approach towards a futuristic vision for the next 15-20-25 years as in the following example:

Immediate Goals	Short-Term Now to 2 Years	Medium-Term 3-5 Years	Long-Term Vision 2020
Students Facilitation Centre UoP Ahmednagar UoP Nashik Campus Facelift	UoP International Campus Public-Private Partnership	UoP WebVarsity Asian Consortiums for Education, Research & Industry	Any Student – Any Exam Anytime – Any Course – Anywhere –
E-Facilitation	Best in India	Top 10 in Asia	Top 10 in World

Phases of the Master Plan

The University of Pune Master Plan 2020 document envisages a four-phase approach as follows:

Phase	Specific Nomenclature	Academic and Financial Year/s
1	Immediate Goals	2006-2007
2	Short Term – Now to 2 Years	2006-2007 to 2007-2008
3	Medium Term – 3-5 Years	2008-2009 to 2010-2011
4	Long Term Vision 2020	2011-2012 to 2020-2021

It is also envisaged that the Master Plan 2020 document will be reviewed every three years during January-February in order to enable mid-course corrections, changes and /or enhancements and budget corrections, if required. Thus, it is presented that the mid-course corrections for the Master Plan and its budget would be determined and established as follows:

Phase	Master Plan 2020 Years	Review and Correction Months
1	2006-2007	None
2	2006-2007	None
2	2007-2008	None
3	2008-2009	None
3	2009-2010	January – February 2010
3	2010-2011	None
4	2011-2012	None
4	2012-2013	January – February 2013
4	2013-2014	None
4	2014-2015	None
4	2015-2016	January – February 2016
4	2016-2017	None
4	2017-2018	None
4	2018-2019	January – February 2019
4	2019-2020	Proposal for New Master Plan to be determined during January – February 2020

It is proposed through this Master Plan 2020 Document that the University of Pune Master Plan Committee, as constituted by the Vice Chancellor, from time to time, would monitor the progress of the implementation of the plan, and would be the delegated body to conduct the mid-course review and propose project and financial corrections during the months as indicated above. The mid-course review and corrections should be presented for perusal and approval of the Management Council by the last week of February of 2010, 2013, 2016 and 2019. The Plan should be allowed an uninterrupted period of three years on each occasion in order to be implemented efficiently.

Goals, Strategies and Initiatives for the Master Plan

The popularly repeated phrase, “*Oxford of the East*”, to describe the City of Pune, owed its genesis to the recognition of the excellence of the University of Pune. Over the past decade, visitors to the City can be forgiven if they would wish to choose between the various universities that have been established in Pune. The challenge, is not simply in being able to reclaim the lost brand of being the apex academic institution in Pune, but to progress rapidly, more than exponentially, across the City and to dissolve global borders. There is perchance, the opportunity, to give rise to a new phrase, to describe Oxford, as the “*Pune of the West*”!

At the crossroads of its history, the University of Pune needs to plan ambitiously to maintain and improve its leadership position in higher education, to enhance its tradition of scholarship, societal commitment, innovation and role in nation building. The University needs to plan appropriately and futuristically, to meet the changing demands of a growing knowledge-based economy and aspirations of students, faculty, civil society and economy. The University of Pune needs to grow beyond its geographical limitations across an intellectual and social matrix, learn and teach on a world-wide frame, and become a catalyst to enable sustainable development for India.

The University needs to establish a brand image of “**GLOBAL PUNE**”, through a pioneering, innovative and extremely challenging approach that would change the very perspectives of education policy and enable convergence with social equity and justice, with accurate emphasis on job-relevance, wealth creation, academic excellence and nation development.

The University needs to challenge the very concepts and definitions of studentship, teaching, classroom learning and exam-based recognitions while bringing about a revolution in rapidly accepting the truths of futuristic paradigms of the rate of change of information technology and the collapse of global boundaries.

As briefly touched upon in the foreword, some of the challenges in perspectives include:

- Why should the illiterate Indian, man or woman, be denied knowledge, merely because they are not counted amongst the literate?
- Can the creation of wealth, and contribution to nation-building, of future IT-savvy generations, be considered the outcome-benchmark of education policy, even if recognised to be a paradox within the goals of a socially-committed democracy?
- Should one be considered a student, only if provided admission within the University’s processes, or should the institution go beyond its perceived confinement, to seek the uneducated, the non-academic, the reluctant student, the poor citizen, the child and the senior citizen, and ensure their integration?

The fulcrum **goals** of the Master Plan 2020, for the University, its affiliated colleges and institutions, through the strengthening of existing institutions, proposing and developing new institutions and the establishment of an International Campus, are therefore, to:

- **Secure** the University's position as the premier academic institution in India and carve a roadmap for securing its place in the top ten in the Asian region and later, achieve the top ten in a global scenario.
- **Realize** the University's potential for excellence and play a proactive role in the internationalization of higher education process within the current WTO and GATT scenarios.
- **Increase** the University's contributions to new academic programs, research, innovation, human resources to the industry and national development.
- **Extend** the University's commitment to excellence in teaching and its focus on creativity, entrepreneurship, environmental planning, ethics and value systems, and commitment to social equity and justice along with empowerment to its various departments, affiliated colleges and institutions.
- **Evolve** necessary legal and governance structure to support this vision within the University, enable support of the Government, Private Sector and stakeholders.

To fulfill the University's academic goals, the campus plan must be able to accommodate meaningful research, faculty development, curriculum planning and delivery, information management and communication. Goals would naturally be required to be linked to strategies for implementation. The **Core Policy Strategies** necessary to implement these goals include:

- **Ensure** improvement of classroom conditions and enable better infrastructure facilities for laboratories, multiple-use areas, faculty offices, research support and aesthetic user areas for support staff, such as attendants and office assistants.
- **Provide** policy innovations and intervene through proactive facilitation to allow the University of Pune, its affiliated colleges and institutions, to continue to attract and retain faculty who combine the finest scholarship inspite of a demanding teaching schedule because of a sincere concern for their students.
- **Employ** an inclusive planning process to develop and design academic and research programs that meet the needs of students, faculty, staff and alumni as well as civil society and governments.
- **Offer** thoughtful planning guidelines that would be sensitive to the historic character and intimate nature of the campus for enabling future development with sufficient flexibility to respond to the changing academic, environmental, financial resources and policies and regulatory requirements.
- **Propose** a model *University of Pune Act* by 2009 that would consider contemporary and future governance needs and professionalism.

The Campus Master Plan

The **Campus Master Plan** revolves around **Five** Core Strategies and **Ten** Initiatives.

The consensus within the participatory approach to develop the Master Plan for the Ganeshkhind Campus has recognised the need to go beyond a mere plan for adding classrooms or faculty offices. However, there is also a need to recognise and consider a holistic plan within the Ganeshkhind Campus to provide financial commitment to departmental requirements for enhancements for classrooms, laboratories and faculty and student utilities or recreational space.

Beyond the walls, and within the Campus, this Master Plan 2020 document is also about guaranteeing that the Ganeshkhind campus can be more meaningful to its natural and academic environments that surround it. The Master Plan 2020 document proposes to establish new, better, larger, aesthetic yet eco-friendly standards for buildings that would be proposed within the Campus. This document therefore, proposes establishing a harmony between ecology and accommodating people and academic needs, the classrooms, laboratories, libraries, play grounds, recreational and leisure areas, public conveniences, the knowledge creating and nurturing incubators where industry and academia meet and knowledge and economics would coexist. (**Annexure 6**)

Five Core Strategies:

- **Strengthen** and redefine the relationship of the campus amongst its various institutions, specialised research institutions and propose new institutions in the Campus and in the City to meet current and futuristic academic and research needs.
- **Refurbish** and maintain heritage sites within the Campus while reengineering, demolishing or reconstructing dilapidated structures to create more space for academic, research and studentship growth without substantially adding to the “*footprint*” of constructed structures in the Campus.
- **Enhance** the aesthetics of the campus in tune with Pune’s historical, cultural and social ethos by providing indoor and outdoor museological facilities.
- **Preserve** and enhance existing natural ecosystems by creating biodiversity and campus forestry plans for the campus, and undertake organized massive drives to plant select trees that would survive the next hundred years. At the same time, identify the more than twenty-five wide canopied banyan trees in the campus and develop the locations in an aesthetic manner through protection, limited use and /or non-invasive multiple-use activities, such as debate, open air art and dance classes.
- **Involve** students, alumni and citizens by sharing the educational, recreational and cultural resources of the campus to provide new experiences, ways and means to promote health, fitness and ethical living.

The **Ten Core Initiatives** for the Campus Master Plan are:

1. Establish a futuristic, 100% computer-enabled, **student-friendly facilitation center** to ensure automation and immediate response to requests for statutory processes, such as admissions and examinations, easy-to-use library and ID cards. Enhance the facilitation through the establishment of a **University Bank**, with web-banking support to help financial transactions with students, collaborating bodies and also to help in purposes of University administration. Ensure ease of facilitation for these processes by establishing **Wi-Max** (the new generation Wi-Fi) networks throughout the campus.
2. Develop a shopping and recreation center, within the Campus, to also serve as a self-employment **market laboratory**, similar to the *Delhi Haat* shopping area in New Delhi, and the Market Collective in Auroville, Pondicherry.
3. Ensure conservation of the historical water management principles and facilities existing within the Campus. Support local water drainage, seepage and underground storage of water by undertaking massive plantation of evergreen trees through an accurate Campus Biodiversity and Forestry Plan.
4. Through an Energy Audit, and in collaboration with the Maharashtra Energy Development Agency (MEDA), ensure energy conservation, and generation of at least 40% of outdoor campus electricity from alternative sources. Within the same perspective, develop and implement an eco-friendly internal mass transit system. Include the development of large parking areas near the exit doors from the Campus to Pune City, and thereafter, in a phased manner, prevent polluting vehicles from entering the Campus.
5. Construct a 15-20 acre Girls' Students Village, with internal road systems, captive internal transport systems, internet cafes, subject-specific libraries and e-libraries, eating places, hostels, shopping areas and recreational facilities. The Girls' Students Village would also be developed at the Ahmednagar and Nashik Campuses. However, the Master Plan 2020 proposes that the hostels within the Girls' Students Village should be kept available on a 1:1 ratio with working women software professionals from the various software parks in and around the City and to working women officers in the Private and Public Sectors. This would ensure peer presence amongst girl students within the proposed Village, and would also provide private investments to develop the Girls' Students Village.
6. Construct additional facilities for boys' hostels, and ensure open integration with the rest of the Campus. In addition, provide for and develop multi-location cafeteria, with an in-built capacity of 1000 students at one time.

7. Expand and enhance the Jaykar Library facility, by creation of new reading halls, exclusive multi-use internet-enabled computer-supported cubicles within existing reading halls for students and faculty within a guaranteed 2000 workstation capacity. Similarly, provide for and establish subject-specific specialised libraries, reading halls and computer-based cubicles in all academic departments of the University of Pune.
8. Establish a 200-seat, high-payment hostel facility with exclusive conference halls, seminar rooms, yoga and meditation halls, high-value cafeteria and dining facilities, and a State-of-the-Art Convention Center of 1000 capacity along with neighbouring exhibition centers and display areas.
9. Plan, create and establish a holistic Sports Village, around the current sports grounds by constructing athletic and other games facilities of Olympic standards including swimming pools, outdoor and indoor sports and traditional Indian and Maharashtrian games.
10. Propose academic and institutional collaboration with the local self-governments, such as the Pune Municipal Corporation (PMC), the Pimpri-Chinchwad Municipal Corporation (PCMC), the nearby Municipal Councils, such as Alandi, Talegaon, Saswad and Baramati, and develop 5-acre subject-specific campuses outside the Ganeshkhind Campus for high-value development orientated sectors such as water supply, poverty alleviation, urban planning, pollution management and transport management, among other subjects. For example, the University of Pune and the Pune Municipal Corporation could collaborate to establish an Asian School for Urban Water Supply Management, if, the PMC is able to demarcate and provide at least 5 acres of land within Pune City and guarantees financial support to initiate the effort and helps develop academic content. This Master Plan 2020 document hopes to identify at least five such projects within Pune City limits, to be developed in collaboration with the Pune Municipal Corporation.

The Academic Master Plan

This exercise was undertaken by a group of faculty members (Detailed report and proposal in Annexure 2). This group enabled participation from all the academic departments in the University of Pune in a pre-designed format. The responses, along with responses from the Students of the University collated by PUMBA students (Annexure - 4), have been studied and have been followed by repeat discussions before preparing the summary of recommendations.

Brief summaries of recommendations received from each department are included in the Annexures (No. 5) for information and reference. Recommendations have also been received from renowned subject experts and resource persons. One such submission is being annexed (No. 3) for information and reference. Common aspects have been pooled together to comprise ten **Core Strategies** and twenty **Core Initiatives**.

The ten common **Core Strategies** are:

- **Enforce** enhancement programs to strengthen the quality of teaching faculty by providing out-of-the-box remuneration and infrastructure support to the very best within each department to enable peer recognition and global appreciation.
- **Encourage** full autonomy to selected Departments and Colleges/ Institutions to seek innovation from within these bodies, proactively invite proposals for new academic and research programs and enable networking on a national and international arena of knowledge development and management.
- **Attract** best students through a process of competitive national merit and provide fast-track or high achievement programs to enable development of knowledge leaders for the nation with specific emphasis for students from rural areas.
- **Create** the facilitation for seeking out students without access to education or without awareness about the advantages of a knowledge driven society and bring them, their family and their community to blend within a culturally diverse multinational University community.
- **Develop** futuristic academic programs with an emphasis on social and gender equity in an extremely proactive manner throughout Pune, Ahmednagar and Nashik, by seeking out the illiterate and bringing them into the mainstream of education through direct-contact or training-the-teacher programs.
- **Improve** the Quality of the Teaching and Learning Environment by promoting foundation-level knowledge in basic disciplines to help faculty revisit fundamental principles, understand the extent of changes and awareness in their subject areas and grow towards the realities of global competitiveness in education management

- **Use** the very best of education technology, electronic and non-electronic, optimally in teaching methods, by providing the facilities equally amongst all departments and encourage new inter-disciplinary research programmes that help connect teaching and research, including applied and action research projects.
- **Enhance** teaching and research methodologies, support systems and infrastructure to better serve the students by encouraging new ways of learning, understanding and pedagogy, through a consultative process within the academic community and peer review through every three years.
- **Strengthen** the common Jaykar library, and provide department-specific specialist libraries, along with modernisation, such as e-journals, computer network etc., and provide for campus-wide, district-campus and multi-institutional borrowing and lending networks while not neglecting the need to provide the facilities beyond daylight hours and during holidays and vacations.
- **Encourage** industry-academia interaction and promote entrepreneurship through a more diverse university community, academic programs and by rigorously promoting the brand name of “**Global Pune**” as a reliable and logical geographical location for high quality education.

The twenty **Core Initiatives** as identified are as follows:

1. **Recruit** at least fifty new senior members of faculty, comprising at least one in each teaching department with proven track record of excellence and recognitions at the highest level in the respective disciplines. This would include for example, Fellows of National and International Academies, and reputed Award winners.
2. **Initiate** and fill up the posts in CAS immediately and along with the process of filling up all permanent, government approved teaching posts through section 76. Further, fill up the remaining posts under section 77. Most of the departments are functioning with subcritical human resources for the past five to ten years and have pointed out urgent need for filling up these posts.
3. **Effect** academic, administrative and financial autonomy to ensure that decisions (regarding matters that affect teaching and research programs) are taken immediately. The Heads of Departments in consultation with the Departmental Committee must be empowered to take appropriate decisions (within the rules and regulations) by delegating authority to them. Corresponding responsibilities (accompanying this autonomy) need to be shouldered by the Heads of Departments /Directors of Schools etc.

4. **Establish** at least ten Chairs for eminent scientists including Noble Laureates, international and national award-winners, and such who might like to work within the University of Pune on Sabbatical Fellowships. However, ensure that the high-value visiting Academic resource persons are provided with the best of infrastructure and remuneration support.
5. **Provide** special status and privileges to those teachers who publish in peer review Journals with Impact Factor more than 10. Similarly, encourage the development of department-specific journals and research monographs, to establish a leadership role for the University of Pune through high-visibility publications along with strengthening of the University Press.
6. **Enhance** interdisciplinary teaching programme by institutionalising the credit and semester system. Review and convert current academic evaluation systems and provide for global convergence by establishing a relative grading system that would be compatible across sciences and humanities.
7. **Introduce** teacher assessment by students and develop a feedback system for ensuring quality of teaching programs. Similarly, provide for peer-to-peer, inter and intra-departmental reviews in a scientifically designed evaluation process, through external academically proficient systems auditors.
8. **Provide** flexible structures for MA /MSc degree programme to enable students to opt for MA /MSc degree on variable time periods. For e.g., some students can opt for fast track MA /MSc degrees or opt for MA /MSc degrees by Research.
9. **Evolve** quality assessment systems and provide for academic quality assessment standards for the admissions, research, course-work and thesis writing and evaluation processes for doctoral research in the University. Ensure transparency in the selection processes, awarding of fellowships, provide public information about the duration of studentships, and the previous history of Guide-Student time periods for completion of the doctoral research.
10. **Establish** Scholarships and or Fee waivers by designing a transparent, socially-sensitive-merit-driven system with a variable approach comprising (a) Merit Scholarships to at least 20% of the students' population, which should be raised to 30% within a period of two years, (b) 50% Total-Fee waivers in education and research programs to all girl students from all communities, (c) 100% Total-Fee waivers in education and research programs to students from project affected families as and when listed by the Government, (d) 50% Fee-waivers and Scholarships for undergraduate students from affiliated colleges and institutions based on specific criteria, as and when determined, and (d) 100% Total-Fee waivers to students from tribal and nomadic tribe communities.

11. **Invite** senior citizens to revisit education with 80 to 100% fee waivers, and renew their knowledge by developing specific academic degree and diploma programs along with internet supported learning material across most departments. Provide ease of admission processes by dispensing with minimal qualifications through the establishment of an entrance examination to bridge the requirements. **However, ensure** that programs are developed equally for senior citizens from highly educated and urban backgrounds and those being illiterate or lesser educated and rural backgrounds.
12. **Review** and amalgamate if necessary the current academic departments, disciplines and programs to remove any duplication and encourage at least 25% of credit transfers from other disciplines and **Remove** rigidity of time bound credit programs to create fast or slow tracks for students based on counseling processes.
13. **Create** virtual classrooms on campus and colleges through the establishment of State-of-the-Art electronically-enabled dedicated auditorium, studios, recording facilities and dissemination networks amongst all departments. Encourage affiliated colleges and institutions to develop similar infrastructure, and review need of and provide financial support for establishment if required.
14. **Develop** an academic and research network with other Universities in the Pune Region, to encourage collaboration, common teaching and research programs so as to collectively position “**Global Pune**” as an international Education Brand. Ensure repeat contact programs and joint academic and research activities with other Universities in the Pune Region without imposing a leadership position.
15. **Attract** students from other States and other nations and to make the student population more diverse, increase the current quota to 30% international, 30% from other states and 40% from University region. Create appropriate secure and aesthetic facilities for students from other regions, including specific international girls’ student’s facilities within the proposed Girls Students Village.
16. **Involve** industry and voluntary organizations in curricula design, teaching and research through the strengthening of the Science and Technology Park and establishment of internships for students in local industry, developing entrepreneurial incubator facilities, electronic networking server farms to provide dedicated connectivities and support along with **Refresher Programs** for industry and other private sector employees through external studentships, industrial campus classrooms, netbased studentships and evening and night schools. Ensure equal emphasis to highly educated individuals and skill-based employees of industries and private sector.

17. **Look** into issues of short term and long term planning of infrastructure by the establishment of appropriate participatory committees with delegated authority to pay special attention to sanitation, water and electricity and to orient the transportation and communication system of the campus to the needs of the campus community. Ensure equal emphasis to day-to-day needs such as, a shopping complex for groceries, medicine, milk and vegetables and for specialised requirements such as a professionally managed guest house and faculty /student cafeteria.
18. **Establish** an Institute of Autonomous Departments (IAD-as formulated by the committee on autonomy). Permit Departments desirous of running a minimum integrated five-year programme leading to Master's degree in a major and a minor discipline as well as in Interdisciplinary subjects. For this purpose, necessary infrastructure and teaching position may be created. The IAD be organised as four Schools - Schools of Life Sciences, Material Sciences, Social Sciences & Humanities in order to promote both foundational learning capacities and interdisciplinary research and teaching programmes.
19. **Plan** and prepare self-financed certificate, diploma, short term, vocational and online courses and programmes for each department. Faculty and non-teaching staff should be provided for on contractual and /or project-based employment based on common policy interventions within the University. Project funds or specifically available financial support on a need-by-need basis should be made available to Heads of Department to catalyse such programmes.
20. **Ensure** academic, administrative and financial autonomy to allow Departments to initiate self-financing programmes, with delegated powers of administration and finance management to the Heads of Department (including hiring of maintenance and secretarial services, and development of infrastructure etc.).

The proposed University of Pune
INTERNATIONAL CAMPUS
(Through Public Private Partnership)

“I do not want my house to be walled in all sides and my windows to be stuffed. I want the culture of all lands to be blown about my house as freely as possible, but I refuse to be blown of my feet by any”

Mahatma Gandhi.... Young India, June 1, 1921

Vision:

Imagine a ultra-modern, global environment, where the student can emerge from within Western Maharashtra and enter the 21st Century amidst a convergence of academia comprising institutions that would challenge the peer presence of the IITs, IIMs and AIIMS within the nation.

Accept the intellectual strength, the persistence of the student and academic faculty and their ability to grow beyond national boundaries, and create 21st Century global citizens to challenge the knowledge management abilities of worldwide institutions such as Harvard, Oxford or Johns Hopkins.

Globalization and Internationalization of education is not just a reality in trade but its fundamental principle remains to be freedom to govern, to give and receive education and to work anywhere³. India is rapidly growing urban community and Pune remains one of the fast growing cities with climate, culture, safety and education as strong attractions. Globally, a concept of educational townships has been successfully attempted.

University of Pune needs to establish an **International Campus** that would have world-class quality education, infrastructure, entrepreneurship, and intellectual incubation in the areas of emerging technologies and knowledge-based disciplines that are growing rapidly. Industry-Academia cooperation is a distinctive and indispensable component for their respective continued existence and growth. India is already a key leader through its' active role in development of future technologies and human resources for these disciplines. This Master Plan 2020 document visualizes a new forward-looking International University Campus that is globally competitive in academic excellence with professionalism and self-reliance and will provide impetus to nation-building and global competitiveness.

Inquiry, investigation, and innovation will be the character of this education enterprise to redefine and restructure the present education system. We believe that with such a prototype system, Maharashtra, especially Pune, would become a powerful hub of development and would attract more investments and industries in the emerging areas. We believe that the global opportunities in export of higher education are so large that such International Universities eventually can

³ Naik Chitra, Globalizing Education: Ends and Means, In Globalizing Education Perceptions and Processes, Ed: S.C. Beher, Indian Institute of Education, Pune, March 2005

easily be established in other regions of Maharashtra without being competitive or inhibitive to each other.

The proposed University of Pune International Campus developed in Public Private Partnership will play an important role to test real needs and help to refine such model for replication elsewhere. The International Campus of the University of Pune will help cross-subsidise various initiatives and programs in the Ganeshkhind Campus, the Nashik and Ahmednagar Campuses, and amongst its various affiliated colleges and institutions for the underprivileged or where funds are not easily available within the normal processes.

Mission Statement:

Promote research-based learning, remove barriers to interdisciplinary education and use technology creatively to establish a multilevel support system; to boost and nurture Industry-Academia conglomeration; enable national and international academic-credit transfers; to promote scholarship and entrepreneurship; compete in the international academic markets; to create innovation, knowledge and wealth and contribute to nation development and the humanity along with emphasis on removal of barriers for transfer of knowledge to the poor and the illiterate across an international arena.

Objectives:

1. To establish through Public Private Partnership, an autonomous world-class institution of excellence with built-in flexibility, professionalism and speed, to provide quality education with international academic standards using State-of-the-Art Technology, distinguished faculty and eco-friendly modern campus with residential facilities.
2. Provide ultra-modern laboratories to facilitate students, entrepreneurs and industries to undertake business driven R & D in emerging areas by the establishment of the triumvirate of national-level peer institutions similar to the Indian Institutes of Technology (IITs), the Indian Institutes of Management (IIMs) and the All India Institute of Medical Sciences (AIIMS).
3. Develop a requisite physical and academic architecture and to create an efficient networking interface between Industry and Academia.
4. Design academic and research facilities to serve as incubation centers for ideas and implementations.
5. Establish an exclusive wing engaged in creating and protecting intellectual property, consultations, research assignments, faculty as well as student exchange programs and internships.
6. Develop strategic collaborations with institutions, universities and industrial houses having global presence.

Focus Area:

This University will have graduate and postgraduate education programs developed on par with international norms to enable inter-university transfers of credits, doctoral and postdoctoral research programs. Following disciplines will form the major focus area:

1. Business Studies (Business management, administration, hospitality management, international business, economics, commerce, knowledge management) through the establishment of IIM-like Pune Institute of Management
2. Engineering and Technology (Information Technology, computer technology, software engineering, telecommunication, Nanotechnology and Biotechnology, artificial intelligence, Robotics) through the establishment of IIT-like Pune Institute of Technology
3. Law and Intellectual Property through the establishment of National Law School-like Pune Law School
4. Public Health and Human Sciences (Biomedical and Pharmaceutical sciences, Epidemiology, Human Genetics and Nutrition) through the establishment of AIIMS, Public Health Foundation of India and NIH-like Pune Institute of Public Health and Medical Sciences
5. Media (Communication, Journalism, Entertainment, Film and Television) through the establishment of Animation Technology Studies, Independent Studios, Prototype Education and Popular TV Channels and Software, capable of positioning the student across the International Electronic and Newsprint Media Industry.
6. Sustainable Development (Environment, Ecology, Biodiversity, Energy, and Water) through the establishment of international schools in collaboration with UN bodies such as UNEP and UNDP, national remote sensing agencies, forestry and wildlife colleges, and international institutions similar to the Smithsonian Institution.
7. Strategic and Global Planning Studies (Defense, International Development Studies, Planning and Public Administration)
8. Centres for advanced technologies such as Nanotechnology, Artificial Intelligence, Cognitive Sciences, Robotics, Quantum Physics, Space Studies and Technology and Nuclear Sciences.
9. Advanced Schools for studies about Indian Knowledge Systems such as Ayurveda, Yoga, Vipassana, Indian Performing Arts and Pure Arts, Ancient Indian Languages and Religions and Ancient Civilisations.

The Architecture

This International Campus, as proposed, would have schools of interdisciplinary nature. Modular courses and credit system on par with the international research universities would be adopted. The academic architecture would draw many components based on current reforms and globalisation of education. It would have traditional concepts of Gurukul experience coupled with modern concepts of University ecosystem, research-based learning, internships, and mentorship and would be drawn from successful experiments at different universities and important

documents such as the Boyer Commission Report⁴. The International University Pune Campus will initially have intense interaction and programs of common interests with the following components:

1. Graduate, Postgraduate and Doctoral programs.
2. Business-driven Research and Development.
3. Entrepreneurship and Resource Planning.
4. Incubation Center.
5. Corporate internships program.

Proposed Location:

The University of Pune wishes to establish its international campus in public private partnership with the State and Local Governments, Academia and Private sector through the grant of land of approximately 500 acres.

Proposed venture of International Campus would need to be located in the Pune region for the following reasons:

1. University of Pune is a Five Star accredited 'University with Potential for Excellence' and ranks as one of the top Indian Universities.
2. Pune attracts one third of total international students coming to India. Pune is also a preferred place of education by a large number of students from other States. This gives a unique cross-cultural environment.
3. Pune has been an educational heartland, ideal to set up a campus of international standards and can be very conducive and safe.
4. Geographical location, international airport, vicinity to Mumbai and good climate adds to advantages.
5. Pune has already been prominently marked as a fast growing engineering business center with several active Software Technology Parks, Science and Technology Park and Innovation Park in place. It is also now emerging as a promising Biotechnology Center.
6. Pune has a proactive mind-set and academic support system required for a dynamic growth of such knowledge based ventures.

Governance and Finances:

It will be advisable to establish a Section 25 Not-for-profit Company involving different stakeholders including University of Pune 30%, Private investor 30%, other educational institutes 30% and the Government 10%. It is estimated that the financial outlay for this project will be in the range of Rs. 1000 crores. The University will play a role as a knowledge partner and may not necessarily invest entirely in this project. The investments may come from private sector; Venture capital or some innovative ideas such as Education Bonds.

⁴ Reinventing undergraduate education. Boyer Commission Report, Stony Brook NY, 1998.

The IUP campus would need to be an autonomous professional body and would further need to be governed by an independent board of directors and board of advisors. Operationally, the University and partner education institution/s will undertake academic components, while the investor or business partner/s will provide professional management structure. The Government may provide necessary land and statutory approvals if needed.

The IUP Campus will be a mini city like structure and there will be sufficient opportunity for entrepreneurial, commercial and business activities, which may help this educational activity to remain financially self-sustaining.

The University of Pune after taking a policy decision, may invite expression of interest proposals from Private partners including educational institutions, business groups and investors. The final partner selection may be done on merit basis and practicability aspects so that the project can take off as early as possible. It is expected to initiate this process by June 2006, establish a company by October 2006 and launch the first programs by August 2007 with a road map to complete this total project by December 2008.

This university will need to provide a unique and symbiotic mechanism to boost the important knowledge-based disciplines and develop human resources capable of meeting the global requirements that would arise from the various institutions to be established as part of this comprehensive proposal. The following mandates are pre-existing.

- The Management Council of University of Pune approved this concept in principle in the year 1999-2000.
- The UGC expert committee and UGC PIHEAD Committee recommendations regarding this concept have been approved in principle⁵.
- This concept note is an outcome of visionaries' intellectual exercise and narrates the need of collaborative effort required to pursue the concept of International University Pune Campus in Public Private Partnerships⁶.

May your resolve be alike; May your hearts be alike; May your minds be one; For you to live in harmony! .. Rigveda.

⁵ Promotion of Indian Higher Education Abroad (PIHEAD) Report, University Grants Commission, 2004.

⁶ Bhushan Patwardhan, in Globalizing Higher Education: Perceptions and Processes, Ed/ S.C. Beher, Indian Institute of Education, Pune, March 2005.

Annexure 1 – (Presented in unabridged and unedited form)

Office Order of the Vice Chancellor – Constitution of the University of Pune Master Plan Committee

It is essential that the University of Pune is able to develop a MASTER PLAN for implementation over a period of 5 to 10 to 15 years in order to accurately develop (a) human resources, (b) academic progress, (c) infrastructure and (d) students' facilities. A comprehensive and singularly-focused approach would therefore be necessary to coordinate the participatory and transparent approaches required to develop the UNIVERSITY OF PUNE MASTER PLAN.

A collective and time-bound effort would be necessary. In order to coordinate and achieve the documentation that would be required, the UNIVERSITY OF PUNE MASTER PLAN COMMITTEE is being constituted, through this Office Order of the Vice Chancellor, University of Pune.

The UNIVERSITY OF PUNE MASTER PLAN COMMITTEE (UPMPC) will include -

- (a) Representatives from various fields of knowledge, administration and focal areas within the University,
- (b) Representatives from similar Institutions, local urban body and expert planners

The UPMPC will be required to function in a two-tier format, namely,

- (1) Provide support to representatives from within the University to interact within their academic and infrastructure areas and invite recommendations,
- (2) Coordinate a **Core Group** of experienced professionals to delineate phase-wise approaches and help provide directions to the University regarding ways and means of activating the recommendations and implementing them.

The UPMPC Core Group can invite experts and resource persons as appropriate to seek suggestions and support as appropriate. Chairperson-designate, UPMPC is permitted to forward invitations and seek support without requiring permission of the Vice Chancellor.

The **UNIVERSITY OF PUNE MASTER PLAN COMMITTEE** will comprise the following members:

1. Dr. Bhushan Patwardhan, Director, School of Health Sciences - **Convener**
2. Mr. Vidyadhar Deshpande, Former Director, Town Planning, Government of Maharashtra, and currently Additional Director, State Institute of Urban Development, YASHADA - In capacity of Expert Planner
3. Dr. Bharat Bhushan, Professor, Environmental Planning and Deputy Director General (Planning), Yashwantrao Chavan Academy of Development Administration - In capacity of Expert Planner
4. Mr. Prashant Waghmare, City Engineer, Pune Municipal Corporation - In Capacity of Representative of Municipal Corporation
5. Dr. Ashok Thorat, Member, Academic Council - To seek, coordinate and present responses from Arts Departments in the University
6. Dr. S. R. Gadre, Professor, Chemistry - To seek, coordinate and present responses from Science Departments in the University in collaboration with Dr. B. A. Chopde
7. Dr. B. A. Chopde, Professor, Microbiology - To seek, coordinate and present responses from Science Departments in the University in collaboration with Dr. S. R. Gadre
8. Dr. Dilip Uke, Professor, Law - To seek, coordinate and present responses from Social Sciences Departments in the University in collaboration with Dr. Sujata Patil
9. Dr. Sujata Patel, Professor, Sociology, - To seek, coordinate and present responses from Social Sciences Departments in the University in collaboration with Dr. Dilip Uke
10. Dr. Anil Keskar, Professor, Management - To seek, coordinate and present responses from Management Departments in the University
11. Dr. Bhausahab Jadhav, Principal, Marathwada Mitra Mandal and Representative, Principals Forum - To seek, coordinate and present responses from Colleges affiliated to the University
12. Dr. Sanjay Sonavane, Professor, Education and Sports To seek, coordinate and present responses from Sports and Support Facilities Departments, such as Library, etc, in the University
13. Students' Representative - To be nominated by Chairperson of UPMPC To seek, coordinate and present responses from Students in the University
14. Dr. S. I. Patil, Professor, Physics, and Representative, Management Council - To seek, coordinate and present responses from Members of the Management Council of the University
15. Dr. (Smt.) Shantishree Pandit, International Affairs - To seek, coordinate and present responses from International Students and related Departments in the University

16. Dr. Rajendra Jagdale, Director, Science and Technology Park - To seek, coordinate and present responses from Science and Technology Project Teams and related Departments in the University
17. Capt. Dr. C. M. Chitale (Retd.), Director, BCUD. - To function as Member-Secretary and Convenor for meetings related to Departmental Representatives within the UPMPC
18. Dr. V. Gunale, Professor, Botany - To function as Member-Secretary and Convenor for meetings related to representatives from similar Institutions, local urban body and expert planners within the UPMPC

By signature of the Vice Chancellor - Dated 13 March 2006

Annexure – 2 (Presented in unabridged and unedited form)

University of Pune Master Plan 2020: Academic

This exercise was undertaken by a group of faculty members led by Professor S.R. Gadre (see Annexure for composition). This group invited information from all the departments in pre-designed format. This group has studied the responses and had several discussions and has prepared this summary. One page summary of each department has been prepared by the UPMPC and is annexed here for more information and reference.

The University of Pune was established in 1949 to cater to the regional aspirations of the students and to develop higher education programmes sensitive to the needs of the region. In the last five decades, the University has grown and diversified from its regional orientation and extended to national and international levels. The vision of the University in 2006 should be to plan an institutional structure for 2020 that will develop a curriculum, academic and administrative community, infrastructure and financial structure that would be compatible to the needs of 2020. This structure should integrate and weave together the aspirations and needs now, not only of the region, but that of the nation-state and the global world in order to create an institute of excellence.

In contemporary times, knowledge grows at a fast pace, and because of this it is highly dynamic. Given this dynamism, it is impossible to elaborate and present a definite statement regarding the disciplines and programmes that the University would offer and encourage to build for 2020. The teaching community of University has mapped out a few principles on which a responsive institutional structure can be created, given the history and the present structure that is in place.

- The University should promote foundational knowledge in the basic disciplines.
- It should encourage that new interdisciplinary research programmes be developed that connect teaching and research.
- It should encourage new ways of learning, understanding and pedagogy.
- It needs to plan through a consultation process within the academic community and through a peer review a new teaching and research programme, every three years.

Given below is the academic plan in terms of three phases:

A. Immediate and Short-term:

- To fill up the posts in CAS immediately and start the process of filling up all permanent, government approved teaching posts through section 76. Further, fill up the remaining posts under section 77. Most of the departments are functioning with subcritical human resources for the past five to ten years and have pointed out urgent need for filling up these posts.
- To fill up contract positions and UGC X Plan posts and extend these for a period of full five years (since most of these posts were filled late). Urgent steps must be taken to get the performance of the teachers under this scheme reviewed. Those performing satisfactorily may be continued/ upgraded with extended UGC/University funding after

the contractual period of five years is over. There is a need to look at the rules of the contractual jobs.

- To effect academic, administrative and financial autonomy to ensure that decisions (regarding matters that affect our teaching and research programs) are taken immediately. The Heads of Departments in consultation with the Departmental Committee must be empowered to take appropriate decisions (within the rules and regulations) by delegating authority to them. Of course, the corresponding responsibilities (accompanying this autonomy) need to be shouldered by the Heads of Departments/Directors of Schools etc.
- To ensure proper functioning of the library by modernization (sufficient number of e-journals, computer network etc.) and providing more space for reading room/journal section etc. Change library rules including timings, in order to make it accessible to the academic community throughout the year including vacation time.
- In particular, MSc. Laboratories in Science departments need immediate attention. We need to enhance the infrastructure and quality of experiments. With the optical fibre network in place and the increase of computers, the University has been well connected. However, the maintenance of computer and network has become a major problem with all departments. Four to five technical assistants need to be deployed across departments for this work.
- To change admission and hostel admission rules in order to admit students from all over the country and abroad in larger numbers. The funds sanctioned for building of student hostels to the University under various 5 year plans and under the University with potential for excellence have been either not utilized or underutilized over the last decade and this need to be corrected.
- To urgently ensure proper classroom conditions, laboratories, access to potable water, women and men toilets, reading halls and common rooms for students and seminar halls in all the Departments. The upkeep and maintenance of this essential infrastructure has been completely ignored for the past several decades and to give powers to the Heads to make the necessary decisions on this matter.
- To ensure that the non-teaching staff is not transferred for at least five years without consulting the Head of the Department. Such undesirable transfers cause disruption of academic programs.
- To ensure a full time library staff for all departmental libraries.
- To involve the CSIR/UGC JRF's and SRF's in conduct of tutorials, laboratories and problem solving sessions. This will be useful for running our teaching programmes and will also provide additional training to these young people.

B. Medium Term:

- Enhancement of interdisciplinary teaching programme by institutionalising the credit and semester system. Switch over to relative grading system and make it compatible across sciences and humanities.

- To introduce teacher assessment by students and develop a feedback system for ensuring quality of teaching programs.
- Encourage and ensure that all students take two courses from outside their department during four semesters of their Master's programme.
- Given the strengths and weaknesses of the students, we suggest that a flexible structure of MA/MSc degree programme be initiated such that some students can opt for slow pace MA/MSc degree while other can opt for fast pace MA/MSc degrees. The individual in consultation with the faculty can take this decision. A Ph.D. quality check needs to be evolved and implemented to enhance and make rigorous the Ph.D. programme. Every department needs to define its own eligibility for international student in case of M.A., M.Phil. & Ph.D. programmes.
- Plan and prepare certificate, diploma, short term, vocational and online courses and programmes for each department which could be self-financed. Some contractual lecturers' positions from the resources generated or from University/UPE funds should be made available for this purpose.
- Ensure academic, administrative and financial changes to allow Departments to initiate these programmes autonomously, to give all powers of administration and finance management to the Head (including hiring maintenance and secretarial services, grant of leave etc.) and provide infrastructures for the same.
- Make available appropriate resources to some departments such as Microbiology, Women's Studies, Law, Biotechnology, History, Chemistry etc. (these are typical examples) that have pointed out need for more space (classrooms/laboratories/seminar halls) and other infrastructure.
- Initiate efforts to bring together appropriate teaching Departments/Schools etc. to provide a unified structure for teaching and research in broader subject areas. For example, there could be an integrated School of Life Sciences and a School of Computing Science.
- In many Departments, M.Phil programme has become defunct. There is a need to re-organise the M.Phil. programme for the Departments that would like to run it. To introduce pre-Ph.D. course work and comprehensive examination for ensuring quality enhancement of our research programmes and to decentralize the administration of examination of Ph.D. thesis and to shift it to the departments.
- To develop exchange programmes within and outside the country, especially among SAARC countries and encourage South-South exchange.
- There is a need to establish more links with the affiliated colleges. For example, summer schools or short-term visits of college teachers may be organized. Possibilities for visiting positions to colleges for a semester could be created for renowned University teachers.
- There is a need to re-deploy and provide appropriate training, wherever required, to the non-teaching staff since the job requirements of the support staff have changed drastically over the last 10 years.
- To initiate processes to reorganize the functioning of the Estate Department and to make its functioning transparent and accountable to the academic community and the campus community.

- To set up a Campus Development Committee to look into the issues of short term and long term planning of infrastructure with special attention to sanitation, water and electricity and to orient the transportation and communication system of the campus to the needs of the campus community. Additionally the campus needs a shopping complex where groceries, medicine, milk and vegetables, and stationary will be available. Also, the campus needs a professionally managed guest house and faculty /student cafeteria.
- To encourage faculty to initiate text book projects of excellent quality to cater to the needs of such books at the national level.
- To set of a committee to look into the working of the University Press in order to professionalize it and make it market oriented.
- To set up a committee to reorganize the external programme and make it a distance education programme in the format of the Open University system.

C. Long term:

- To establish an Institute of Autonomous Departments (IAD-as formulated by the committee on autonomy). Permit Departments desirous of running a minimum integrated five-year programme leading to Master's degree in a major and a minor discipline as well as in Interdisciplinary subjects. For this purpose, necessary infrastructure and teaching position may be created.
- The IAD be organised as four Schools - Schools of Life Sciences, Material Sciences, Social Sciences & Humanities in order to promote both foundational learning capacities and interdisciplinary research and teaching programmes.
- All departments would have its own BoS's with each faculty member as member of BoS. Each department and its faculty will do the governance of all their academic programmes, including research programmes.
- Each School will have its own Faculty and an administrative office under the Dean. The Departmental faculty would be represented in the School Faculty in order to promote interdisciplinary across departments.
- There will be an Academic Board of the entire Professors/Heads and Directors encourage interdisciplinarity across Schools and to ensure standardization and uniformization of rules and regulations within the IAD. (The particular provision regarding representation in Academic Board is enclosed in the report).
- In addition, these bodies four other bodies have been proposed in the report with representation from across teaching community, University and State government.
- Administrative and finance staff of each Department will be separate from the University and under the governance structure of Departments and Academic Boards.
- To ensure the continuous growth and expansion of IAD, the University needs to establish a separate campus for running nationally and globally compatible Master's as well as doctoral programmes. Additional hostels including married student's hostels need to be established together with a faculty club and other infrastructure.
- It also needs to promote new interdisciplinary programmes, which will build new knowledge in and across Science, Social Sciences and Humanities.

- The criteria for hiring of senior and junior-level faculty on this campus may be much more than the minimum qualifications stipulated currently. For example, we may require certain years of postdoctoral research experience. Another suggestion is assessment of the applicants for faculty positions by a peer team. Such an assessment may probe the teaching/research abilities of the applicant.
- To create a Centre for documentation, a museum, repository of archives of research in order to preserve learning and pedagogic knowledge.

Annexure – 3 (Presented in unabridged and unedited form)

Recommendation Matrix received from Dr. P. J. Lavakare, Country Partner, Institute of International Education and former Executive Director, USEFI, India

Number	Target	Status Today	Scene 2020	Actions for Inclusion in the Master Plan
1	INSTITUTION	State University- tends to become very regional	Must be recognized as an International level University	Existing academic structures and infrastructures for governance need major overhaul - Faculty from different parts of India to be inducted
		Good Brand in the Past - waning fast	Brand of Pune University (International) to be developed de novo	A new initiative to be started and integrating the existing faculty only selectively - Yes there will be resistance
		Most of Faculty not with National Recognition	Must induct faculty only with high research record and attracting funding from agencies - Fellows of Academies to be attracted.	Undertake a major drive for Recruitment of Excellent Faculty - Nationally and Internationally- Promote high level international exchange programs with foreign institutions. Also closely work with National Research Institutions and evolve teaching and research programs
		Research Content not adequate	as mentioned above	as mentioned above
		Recognized by UGC as having Potential for Excellence	Leap Frog this potential by going International	Work with UGC to set up Pune University (International) campus as well as strengthening the existence programs

Number	Target	Status Today	Scene 2020	Actions for Inclusion in the Master Plan
		Has a Large international student population not cared for well	Must target to have at least 20% of its student population to be consisting of International students- Set up a qualified and professional office of International Students	Critically evaluate its existing international programs and dovetail most of it into the Pune University (International) activities
2	STUDENTS	Nationally talented students are not attracted- Perhaps focus only Regional	Must aggressively market its key program and offer a limited number of Scholarships for the top students coming out of the high school system, into its colleges and also for the PG programs. College students isolated from University Faculty- Lack of exposure to research	Make Students as the focus for projecting the name of the University- Offer atleast 10-15 % attractive scholarships in disciplines that have a good faculty and reputation- Involve the Pune/Maharashtra Industrialists to encourage student population through scholarships, internships and placement. Have the students exposed to guest / adjunct faculty from Industry and Research Institutions in and around Pune- Have atleast 10% of student population from foreign countries- Recruit through Education Fairs abroad
3	FACULTY	Most of the Faculty not recognized nationally - Research programs weak- Recruitment appears	Have an aggressive drive for recruiting top notch faculty in the coming 2-3 years. Have innovative schemes for inviting	Draw out a Strategy for High Quality Faculty for Teaching and Research at undergraduate and PG level- Improved Salary scale coupled with Evaluation, performance and accountability-

Number	Target	Status Today	Scene 2020	Actions for Inclusion in the Master Plan
		regional	outstanding faculty known for research and teaching - Invite Guest Faculty from Industry and Research Institutions - Induct few visiting International faculty under exchange programs enabling our faculty to go abroad for Research & Teaching - Faculty must teach some undergraduate courses	Permanent posts (tenure position) to be a very small part of the total faculty. Must have some sort of a "hire&fire" policy - Encourage International Exchange Programs, bringing and sending out faculty members for sabattical and or short term research/teaching assignments
4	MANAGEMENT	Highly top down and beaurocratic administration- Academic Community not involved in policy making and planning	Governance to be given high priority with accountability to the Student and the the National and International Academic Community	Governance practices to be reviewed and decision making decentralized- Undergraduate and Post Graduate Education to be integrated bringing a nexus between the affiliated colleges and the University.

Annexure – 4 (Presented in unabridged and unedited form)

**Recommendations for the VISION 2020 DOCUMENT from the
Students of the University of Pune –
As collated and documented by the Students of the
Department of Management Sciences, University of Pune through discussions with
Students, Members of Faculty, Heads of Departments and Principals of Affiliated Colleges**

Introduction

1. The Master Plan Committee established by the University Of Pune is an initiative to make the University of Pune, State of the art and world class by providing for
 - (a) Unique and Innovative Institutions and Centers.
 - (b) Human Resources.
 - (c) Academic Excellence
 - (d) Infrastructure
2. In light of above vision statement of the University, all the Departments and Institutions of the University of Pune should have their own vision and plan & align the same with the Master vision. The objectives as well as the means also need to be worked out in order to realize our vision as a team and also to position the University of Pune on the global map.
3. The vision of the University and the Departments will have to be fine tuned and integrated to obtain the required synergy to achieve the desired objectives. It is important that such visionary Master Plan can be implemented only if all the authorities keep their personal likes & dislikes away from the implementation plan & support each other to ensure success of the plan.
4. This paper makes an attempt to highlight the desired vision of the University of Pune as well as the Department of management Sciences to achieve the overall visionary objectives mentioned in paragraph 1 above
5. The desired visionary plan for the University may include the following.
 - (a) **University Information Centre** may be established as near to the Main entrance of the University campus. This centre should facilitate the visitors to obtain necessary basic information about various courses run by all Departments of the University of Pune with the help of Query Module specifically designed by each Department based on the general queries raised by the visitors. The centre may be manned either by the representative of each Department or by the select persons specifically trained for the job. The centre may be connected to the entire Departments through LAN so that the Query Module can be updated by the respective Department. It is proposed that the

Information Centre may be built in the open space near the Department of Management Sciences and Department of Microbiology. Only the visitors who cannot be satisfied by the Information Centre, may be issued with Visitor's Pass to visit the specific department. This will automatically ensure that only screened persons are allowed the access to the University Campus and will meet the security considerations.

- (b) **Manual of Administrative Correspondence and Requirements:** Every department of the University of Pune indulges in various types of correspondence, both, internal as well as external. All types of correspondence such as Demy-Official letters, Official letters, telegrams, Inventories, Personal application, Minutes of various formal meetings etc are proposed to be formatted to maintain uniformity. The letter heads of various Departments, Visiting cards, Identity Cards etc may also be standardized for their size, font, color etc. The ink used by various authorities may also be standardized.
- (c) **History Book:** Many important events take place in the University campus which need to be documented for the posterity. For this purpose, either each department may be directed to maintain their respective History Book or a centralized History Book may be maintained. The history book may also contain some of the important photographs of the events as well as messages from the dignitaries visiting the campus.
- (d) **Standardization of the Signage:** All the Boards and road signage/ indicators may be standardized for their size, shape, font-size, colour-schemes and mounting. Self illuminating material may be used to obtain readability in the night. These should work as path finders for the visitor(s).
- (e) **Departmental Logo/ Crest:** To create unique identity for every Department of the University, every Department may be granted separate Logo/ Crest/ Symbol that can be exclusively used by that Department along side the University logo. The logo may be displayed at the entrance of each Department. Such display material may be standardized.
- (f) **Monthly Programme of various Departments of University:** apart from the routine class-room lectures, may be published so that the staff and Students of other Departments know about the event and interested persons may obtain the benefit. The programme may be published centrally by the University PRO.
- (g) **Dress Code:** A minimum Dress Code for the University staff, both teaching and Non-teaching, may be decided & implemented. This will certainly have the required effect on the general behavior, particularly for those who frequently interact with the visitors. Seasonal changes/ requirements as well as the positional status of the persons may be seen while deciding the Dress Codes.
- (h) **Monthly Meetings of the Heads of Department under the chairmanship of the Hon'ble Vice Chancellor** be held & the minutes published for the information of the University staff. This will help in resolving many inter-departmental issues and bring the Departments closer. The general staff will be informed about the happenings and their participation levels will improve. The staff as well as students will generate more faith in the systems and decisions as these will become more transparent.

- (i) **Affiliation to Select Foreign Universities:** To share the wisdom as well the resources, the University of Pune may consider having more affiliations to the select foreign Universities. We may have exchange programs with foreign Universities at different levels e.g. for students, faculties, etc.
6. **Education Modules** (automated) may be designed & conducted by the University Staff & Student Bodies for (a) Street Children Education, and (b) Rural Women Empowerment
7. **Review & Restructure the University campus** for residential & Non-residential areas. It may be seen if any of the residential building(s) could be used with some modifications, to suit the academic requirements & vice versa. This would allow very clear demarcation of residential & non-residential areas and have effective control on the visitors. The entry gates may also be separated for these areas, if possible.
8. **Hospital with modern facilities** may be built up with the collaboration of some business houses within the University campus or selecting additional campus, where the facilities/treatment may be subsidized for select strata of society, University staff & their families as well as the Students (including foreign students).
9. **Work & Method Study of various Administrative Departments** of the University may be undertaken of the following Departments with a view to avoid duplicate nature of work /documentation, simplification of forms & procedures etc.
- (a) Accounts & Finance Department.
- (b) Public Relations department.
- (c) Examination & Students Related Departments.
10. **Automation & On-line Services of all Public Departments** e.g. Finance, Admissions, Examination with User friendly Menu Driven Modules. All these modules should be available at the University Information centre, may be with partitions for access of data.
11. **Amenities Park** for the University Staff & Students with swimming pool, Gym, Close courts for Badminton/ table tennis/ squash etc, Golf course, Lawn tennis courts etc. The Park may be situated closer to the residential area.
12. **Award of Degree** in various disciplines, such as, Indian Literature, Indian dance, Indian Classical Music, Yoga etc.
13. **Students-run Cafeteria and Mobility Vehicles** within the Campus. Both these facilities may be at subsidized rates but financially viable.
14. **Two Vehicle Parks** at each entry gates to the University of Pune. These may be manned by the students under 'Earn & Learn Scheme' or by a vendor. The mobility vehicles should pick up the students from these parks to various destinations at regular intervals. This will reduce the vehicular traffic within University campus to a large extent, limit the petrol

- expenses of the students, and reduce the pollution levels as well as the accidents in the campus.
15. Proposed Information center near the main entrance of the University, may also house the essential services like **Bank, Post Office, Canteen. A Stationery stores run by the students**, catering for the text books, note books & other miscellaneous material including Photo copier, may also be operated from this centre.
 16. The students of the University have to carry lot of reading material as well as text books, note books & stationery etc. Every Department should cater for **a locker** for each student on their roll. **A ward robe** of appropriate size may also be provided to each student to keep his/her uniform.
 17. **A Bank run** by the University Management & the Students may be started to cater for all banking needs of the University staff & the Students. A proposal to this effect may be drawn to obtain necessary permissions.
 18. The Department of Management Sciences has the following visionary plans.
 - (a) **Additional Campus of International repute:** In order to enhance the Brand Equity of the University and to keep up with the pace of changing times, the Department should plan to establish a world class residential Business School, where students can undergo rigorous two year full time residential Management Programme. Such Business School should offer unrivalled opportunities for learning and network with the best business minds across the globe to create a class, which is truly international as well as culturally and professionally diverse.
 - (b) **Additional courses in the existing campus:** The Department should plan some courses in the field of Management which will not only further the management Education but will also help the Department to generate funds e.g.
 - (i) Executive MBA
 - (ii) Extension courses in Management
 - (iii) Faculty Development Programs for other colleges/institutions.
 - (c) **PUMBA As Centre of Research Activities:** The Department should plan to take more Research and Consultancy projects both in Core academics as well as industry. With the adequate infrastructural facilities like air-conditioned class rooms, Auditorium, Computer labs etc.
 - (d) **Encouraging Entrepreneurship:** In order to encourage entrepreneurship capabilities, which is also the need of our industrial environment, the Department plans to associate with an incubation centre which will help the interested students to prepare business plans and gather financial support from such institutions.

- (e) **Social Activities:** The Department should feel and assume its responsibility towards the Society in general. Keeping this overall objective in mind, the Department has already begun to work on Group Social Projects as an integral part of its curriculum. The Department plans to design specific social projects and continue to work on them as an ongoing activity.

Conclusion

It is indeed very important that the University of Pune lays its Master Plan for progression taking into account the views of as many Departments and the individuals. The vision of any kind requires whole hearted contribution from every one, particularly; the support systems must get themselves aligned to the requirements of various Departments as per the Master Plan. The most important thing is that, visionary plan, once accepted and frozen should not diluted or tinkered by any subsequent authorities for any reason lest the efforts and resources are wasted and the participants feel frustrated.

Annexure – 5 (Presented in unabridged and unedited form)

Academic and Infrastructure Requirements of University Departments

Department of Botany

Department is known since its inception for basic research and teaching and having M.Sc., M.Phil. and Ph.D. Programmes. The total No of Students 100 for M.Sc. having eight specializations for second year and 40+ for Ph.D. in the areas such as ecology, algology, mycology, physiology, cytogenesis, angiosperm, plant biotechnology, pharmacognocny. Department is supported by DRS, ASSIT and FIST programme of UGC.

Proposal

Propose to have establishment of Field Biology Station, Western Ghat Biodiversity Assessment and Conservation Center.

Presently department offers core courses and eight special papers and present faculty is 16 and 3 post are to be filled. New proposal include few new courses, credit course for term abroad program for visiting students,

Facilities for transgenic plant, finger-printing facility to map plant resources from Western Ghat, Job oriented courses and these could be taken up by regular students as an add on course.

To achieve these few faculty positions in basic and applied areas are required.

Department needs additional space for research and instrumentation in the existing building. The new facility is proposed to have Field Biology Center and Western Ghat Biodiversity Assessment and Conservation center in Bhimashankar or Bhadardhara.

In the International campus proposal to start credit based course for foreign students as part of their credit requirement in the areas of tropical Ecology, Limnology, Watershed Development, organic farming.

The total financial requirement: one crore +.

Department of Physics:

Department is known since its inception for basic research and teaching and having M.Sc., M.Phil. and Ph.D. Programmes. M.Sc. programme offers 13 specialisation and also offer scholarship to deserving students. Department is recognised as a advance centre for Material Science and Condensed matter Physics by UGC. Department is supported by DST by FIST Programme. The new thirst areas such as Nano material and Quantum Physics. Department have linkages with Universities abroad and ICTP.

Proposal

Proposed to establish M.Tech Material Science, School for Chemical Physics for teaching and research. It also proposes to start certificate course in Vacuum Technology and Physic and Technology of Gems.

Need to fill the present and new position either by Government or by Contract.

Department needs additional 10000 s.ft for new faculty members for research.

The existing building be replaced by multistoried in a span of 10 years.

More Academic Collaboration for exchange of Faculty.

Training for Non-Teaching Staff.

Young Faculty member be encouraged for short-term training programme in National Laboratory and abroad.

Department of Microbiology

Department admits students for M.Sc. after entrance examination .25 students are engaged in research leading to Ph.D in the areas such as microbial and molecular genetics, environmental microbiology and molecular microbiology. Department have active collaboration with CSIR, BARC, NCL, TIFR, TIFAC, CFTRI, CRDI, CIMP and other leading universities.

Proposal

Propose to establish: New courses such as M.Sc. Tech in Industrial Microbiology, M.Sc. Microbial Biodiversity and Advance Diploma in Microbiology. Propose to establish research laboratory of 1000 sq. feet, research in genomic and Post-Doctoral program.

Department also proposes to run short-term courses for industry and institutions in the areas of Industrial Microbiology, Agro Food processing and Medical technology.

Department urgently need faculty position either through government or contractual positions and additional building. The budget required is about 2.5 crores for building and instruments.

Department of Bioinformatics:

The Ministry of Communication and IT, Govt. of India, have identified the Bioinformatics to offer module-based courses to employees from industry and other organizations. Department has highly acclaimed infrastructure in term of computer hardware, software, database and connectivity. Interdisciplinary teaching program with inputs from other departments on the campus and national laboratories. Center does not have any government-approved posts. The department is already run a part time course on clinical research and data management for industry and other organization.

Proposal

Department needs six faculty and non-teaching position on contractual basis. Plan to start evening courses on Bioinformatics for the benefit of working people.

Department of Zoology:

Department has been recognized as Center of Advance Studies and is supported by DST FIST. Presently admits students for M.Sc. and students registered for Ph.D.

Proposal:

Need for increasing budget from Rs. 6000/ student to Rs 16,00/student.

Building is 50 years old and need up-gradation of infrastructure of labs, museum, and animal house. Provision of uninterrupted power supply. Need faculty positions and minimum 6 non-teaching post for effective functioning of the teaching and research program. Would like to have autonomy for financial and academic matters.

Department suggested to merge Biotechnology and Microbiology and the same could become the unit in life sciences.

Propose to have Career Guidance Cell for students and university should offer 10-research fellowship per department.

Department of Biotechnology

M.Sc. Biotechnology program is one the first program in the country supported by Govt. of India. Admission is on the basis of national Entrance Test and admits students. Research program in various basic and applied aspect of biotechnology is undertaken leading to Ph.D.

Proposal:

Department needs 4 faculty positions and 3 non-teaching staff.

Additional building of about 10,000 sq. feet and instruments costing 2 crore.

Propose to start Lab technician Course. And Post M.Sc. Diploma and Diploma in Biomedical sciences.

Effective coordination with Science and technology park and need autonomy for effective functioning of the teaching and research program

Department of Anthropology

The only department of its kind in the State, imparting field-based training in social research. Thrust areas are in Medical, Gerontology, Growth and Nutrition & Development Anthropology. Need to have Archeological Anthropology, Laboratory for study of molecular anthropology, More posts for Teaching and Non-teaching staff. There is no undergraduate course in the State.

Proposal:

Introduction of new courses, A special cell for research and exhibition, Extended facility for other institutions/departments.
Establishing fully equipped Molecular genetic laboratory and introducing short courses.
Study material in Marathi for short courses
Need for additional staff Faculty – 3, Technical 3, Librarian 1 and contractual faculty.
5 vacant posts.
Collaboration with Institutes/Universities in India and abroad.
More space is required to accommodate class room, Library and the Laboratory.

Department of Atmospheric and Space Sciences

The teaching programme is very sound and the experienced faculty contributing the same. The MOU with Indian Institute of Tropical Meteorology and Atmospheric Sciences have put the course well ahead in the country.

Proposal:

Needs a building to accommodate the class-room, library and the laboratory. Presently due to lack of space only computer simulation experiments are offered.
In forthcoming six months a MOU with Indian Meteorological Department.
First year programme be conducted by the Physics Department, the visiting faculty can do better in second year teaching.
Collaboration with other Institutes/Universities in India and abroad needed.

Department of Computer Science

Master's program in Computer Science is first such course in this region. The focus is on diverse areas of computing and technology concept based on a science foundation.

Proposal:

Propose to have 5 years M.Sc. integrated program
Integration of CMS and ISSC retaining their own identity.

M.Sc. (PPPR) to be started. Department tried to start DSP Course but due to rigid administrative rules the course could not be started.

Academically under staff and needs immediate attention to fill the competent faculty.

There is also a need to have supporting staff.

Minimum standard norms be followed in selection of students for these courses.

Department of Communication Studies

Self-supporting course on Communication is run by the department. Last two years students participated in national Level competition and won First Award. Work in collaboration with University Defence Studies and North Eastern Region. Presently appointed 3 producers on contractual basis. Department has link with School of Education and Communication, Sweden and propose to have MOU with Deakin university, Australia.

Proposal:

Needs classrooms, student's room and other basic facilities for the students and staff. A new building is required for this purpose.

Propose to merge the department with others having similar types of teaching and research activities.

Quality enhancement program for faculty is required.

Department of Electronic Science

Presently M. Sc. and collaborative self-supporting courses are run on VLSI Embedded System. Admits students on the basis of entrance test. Ph.D. program covers basic and applied aspects of the subject.

Proposal:

Propose to start M.Tech. in VLSI and Embedded System from 2007 in collaboration with ISR, NCRA, IIT and Industries. Smart sensors on MEMS Technology is the future need and therefore needs support.

There is immediate need of four teaching and seven administrative staff.

Additional 10,000 sq. feet space to house new M.Tech. Program while additional 5000 sq.feet required for MEMS and other research program.

Department of Geography

The teaching syllabus includes physical and human environment. Strong emphasis is given on techniques and skill building in basic and applied subjects. Have required teaching and supporting staff.

P.G. B.Sc. (Applied) course on GIS and Remote Sensing and admits 50 students. Department receives consultancy and research projects and also received DST FIST program.

Proposal:

Needs additional space and departmental Library.

Propose to start M.Sc. in Geomatics

Distance learning Courses as certificate, Diploma and Advance Diploma in:

Disaster management, Watershed management, Natural resources, RS and GIS

Department needs increase in research grant from university and appointments of additional post especially for GIS and Remote Sensing Courses.

Geography should be made as interdisciplinary subject.

Undertake evaluation-rating system for teaching and research students.

Organize short-term theme based courses for college teachers.

Funds generated by the department should be handled by the department.

Establishment of Chair with open invitation.

The upper limit for expenses be raised to Rs. 20,000/-

Training program for non-teaching staff is required.

Department of Geology

M.Sc. Geology teaching and research program in hydrology, environmental geology, geochemistry and quaternary geology. Department has received grants from various funding agencies for research and organized Training and Orientation program in emerging areas of geology. Students participate in various training program organized by national Institutes.

Proposal:

Need to fill 6 vacant teaching posts. After retirement of few faculty expertise to teach important courses such as economic geology and remote sensing needs to be filled. Department also needs technical staff for laboratory.

Faculty needs training for quality enhancement.

Department of Mathematics

Department presently have M.Sc. teaching and Research program

Proposal:

Most of the requirement are suggested for the university and not specific related to the department of mathematics.

University should award scholarships to the M.Sc. students.

Provide fund for seminar, training, workshop and conferences

Propose to start 5 year M.A./M.Sc. integrated program

Needs additional staff

M.Sc. with new specialization
Additional space of 2500 sq.ft

Department of Library and Information Science

A Master's two years credit based program leading to M.Lib. At present 30 research students are working for Ph.D., many of them are from are foreign students. There is a continuous education program for the faculty. Have strong Alumni Association.

Proposal:

Lack of space for teaching and there need additional space.
Needs additional journals for library science.
Initiate M.Phil program.
One year M.Lib I.Sc. Course
Introduce elective courses
Needs additional faculty and supporting staff.
Exchange program with foreign universities.
New Interdisciplinary Course for MLISc in collaboration with departments on the campus.
Separate building for teaching equipped with latest seating and audiovisual systems.

Department of Management Sciences

Department has now its own building with required classrooms and other facilities. Department presently have regular MBA and MBA Biotechnology. These courses are interdisciplinary and trimester credit based program.

Proposal:

Needs additional interaction with Industries.
Autonomy for academic and financial matters
Introduce the concept of Adjunct faculty
Encourage inviting faculty from India and abroad.
Need revision on honorarium for visiting faculty
Introduce executive MBA for managers with experience.
Addition of space in the present building
Collaboration with foreign universities.

Department of Statistics

M.Sc. Course is good mix of theory and application. Department revise course content every 10 years and have computer lab with major software required for the subject. Students also get online training in some of the courses.

Department is one of the very few department in the country having facilities for various users and training. Also have student placement cell.

Department collaborate with various leading institutes.

Proposal:

Needs departmental autonomy

Propose to introduce Advance Course in –Programming

Research in major areas are planned and revision of syllabus is in 2012

Need classroom to accommodate 80 students.

Needs post under vacancy

Technical assistant for software

Interdisciplinary School of Health Sciences

The school received UGC grant to start Masters programme in Public Health for first time in India for non-medical students. Presently two degree courses are undertaken one M.Sc. health sciences and second on Nutrition and Diatrics. Nearly 30 students are admitted each year. There is growing demand from foreign students for these courses. School has very strong linkages with National and International Research and funding agencies as also with leading Pharma industries.

Proposal:

School visualize that by 2020 Interdisciplinary School of Health sciences becomes one of the International enter of excellence in public health, community health, epidemiology, lifestyle, diet and nutrition, longevity and traditional medicine. Also visualize strong interaction with various agencies.

Needs additional building with about 100,000 sq.ft and 4-6 acre land.

Propose to have Chair Professors and Visiting scientists

Course for industries and voluntary organizations

For each unit there is need of 6 faculty and provision of Rs. 12 crores

Joint Degree program with Indian and or International Universities.

Propose to start research in above areas.

Training for non-teaching staff

Department of Environmental sciences

The department is one of the interdisciplinary science school established in 1978. Since 1985 M.Sc. Environmental Science program is run with the help of visiting faculty. There is growing demand from Indian and foreign students fro M.Sc. and Ph.D. program. Department has

collaborated with various institutions and government departments through research projects, consultancy, training programs. Sakal Trust provided fund for building.

Proposal:

Needs teaching staff. Requires revision in teaching syllabus.
Suggested specialization courses for second year M.Sc.
Proposed for several PG Diploma and Certificate courses
Need for collaboration with various institutions.
Creation of special fund for training to staff
Additional building for labs, classrooms and seminar hall.

School of Energy Studies

Well equipped Laboratory for Photovoltaic Photothermal Research, Ministry of Non Conventional Energy Resources approved Regional Testing Centre for Solar Cookers, and Flat Plate Collectors. Two years M.Tech. Energy Studies course is well established. Endowment of the order of Rs.90 lakhs for the salary of the Chair Professor and for other expenses by Maharashtra Bank. One of the most important areas for the future development for nation.

Proposal:

It is proposed that the School of Energy Studies be converted into Institute/ Department for energy resources.

It is proposed to set the following objectives to be accomplished

Initial major research projects in the area of Energy. Generation and in Non-conventional areas such as solar, wind hydrogen etc.

Participation in projects initiated by MNES.

Develop human resources in this area.

Provide consultation and guidance to the manufacturers.

Need for faculty and supporting posts for effective teaching and research.

Close co-operation with various departments for development of biofuels.

School need separate building of 25,000 sq.ft and Rs. 2 crore.

School of Basic Medical Sciences

Strong M Phil and Ph.D. Programme where students from foreign countries seek admission. Innovative Teaching Programme such as B.Sc.(Applied) B M Tech, B.Sc. (Applied) Optometry have been developed under this school. Medical Physics and Bio-engineering has been identified as an important area by UNESCO. This area has potential to undertake projects in Interdisciplinary area which would be compatible with the policies of National School of Health

Proposal:

The School proposes to start new course M.Sc.Medical Physics and Certificate Courses on Hospital Waste Management and Audiometry. The School proposes to undertake projects related to Medical Physics and integrate with the activities of National School of Health.

Requires faculty and administrative staff including technical expertise. Collaboration with Medical Colleges, Hospitals, Institutions to conduct courses and also the research.

New Certificate courses on audiometry techniques, lasers in medicines and medical techniques for rural health.

Independent space of 10000 sq.ft. will be required for office, library, lab and lecture hall.

Department of Sociology

The Dept is known nationally and internationally for Research and teaching in various studies with several interdisciplinary courses. Faculty gives special attention to students opting Marathi as their medium. The teaching program is however carried out with available faculty. The further planning is difficult, as the sanctioned posts are not filled in.

Proposal

Proposed teaching and research program – Master / Applied Master / Certificate/ Diploma in area of Critical Globalization Studies.

Needs staff and faculty on contractual basis (Appropriate budgetary provision needed)

Organizing into 4 schools for interdisciplinary Masters programmes: 5years (3+2) integrated programmes

Emeritus/Chair Professor for Department and centers. Budget provision : Adequate for additional/contractual faculty/staff

Certificate courses for state bodies, NGOs, Media Personnel. Summer Schools for Doctoral students/Researchers in NGOs

Collaboration of South-South, Study Term abroad Collaboration with CSCS, CSS.

New courses, integrated courses to be started.

Department of Economics

MA in economics and PG Diploma in Foreign Trade.

Students strength is 150 and department undertakes research work.

Proposal:

Apply for DSA programme.

Requires infrastructure facilities.

Additional faculty positions and supporting staff

Department of Education and Extension

M.Ed and M.Ed Physical Education courses to prepare teacher educators, Well-qualified and experienced faculty. 180 Postgraduate students and 50 Ph.D.
Joint activity for deployment of I.C.T in Teacher Education.
MOU with Universities in Australia and Sweden.
There is a shortage of human resources in teaching and technical. Needs infrastructure.

Proposal:

M.Ed (Educational Technology),(Inclusive Education) and M.A.(Education) will have the major chances in next 10 years. Additional research programs in other modes. M.A.(Interdisciplinary education) and development be started.

Additional Teaching/Technical staff is essential for the development of courses. Sanctioned posts needs to be filled in or contractual arrangement be made.
HOD be authorized to have powers to sanction upto Rs.25000/-
Non-Teaching staff to undergo IT training.
Teaching staff must undergo E / Web base learning.

For other infrastructure facilities required please refer Master plan document (Hard Copy). Direct BSNL telephone connection is needed urgently.

Department of Psychology

Department have a strong tradition in experimental psychology and have well developed laboratories with up to date theory courses. The limited space for laboratory and limited training in actual field work make adverse effect on developments.

Proposal:

Department would like to start Short term courses related to HRD, social research, industrial and organizational behavior, mental health etc. M.A. Professional psychology of 3 year duration. Needs manpower, separate building.
An advanced research center to undertake in basic and fundamental psychology, as well as applied psychology. A full time counseling center for all those who are in need.

Vacant posts be filled. Need qualified staff urgently as the laboratory activities are suffering. A computer programmer is also needed immediately.
More elaborated concept of expansion of the departmental activities are given in the main document.

Integrated M.A./M.Sc. course be provided. Needs a separate building with more staff and adequate laboratories to carry expanded activities /courses.

Department of Communication and Journalism

A strong focus on Print Journalism and now on TV and Radio Journalism. Excellent training in practical aspect. Emerging areas: Online Journalism, Investigating Journalism and Developmental Communication. Two certificate courses introduced.

Needs more concentration on teaching in Advertising and Public Relation, Communication Theories, Media Management and Film Studies. Text Books/Handbooks or Course material is not prepared.

Two major UGC projects are near completion and there are 15 research scholars studying various topics.

Proposal:

Technical Communication and Book editing/publishing –Certificate course converted gradually to Diploma and Masters courses.

Involvement of Top Executive in Print and Electronic Media .

Appointment Teaching and non-teaching positions. Association of top journalist from print and television for interaction with students.

Collaboration with National Agencies, universities from SAARC, European and American universities.

Educational Multimedia Research Centre

EMRC is equipped with professional and technical infrastructure. Staff has received training in India and abroad. Centre is connected with EDUSAT and provide input to VYASA, DD Bharati, DD National etc. Also have independent Marathi Educational Channel.

Proposal:

Large number of post vacant and need to make appointments at earliest.

Interaction with other agencies such as agriculture departments, Open Universities. Financial powers to Director. There is need to merge various departments such as Communication, Communication and Journalism.

Need additional 50,000 sq.ft area which behind EMRC .

Department of Defence and Strategic Studies

In addition to regular staff department have Army Chair instituted by Indian Army.

Syllabus is under revision. Have collaboration with IGNU on National Security and other universities.

Proposal:

Teaching position in interdisciplinary areas and requires three positions and few non-teaching posts. Visiting faculty from Scientific and Defence establishments.
Need to create School of Social Sciences.
New Certificate and Diploma Courses in national Security.
Preparation of reading material
Requires additional space, budget and renovation.

Department of Philosophy

Department have Indian and Western Philosophy in teaching and research. Received assistance in the form of ASIHSS, DSA III and have Centers in Social Sciences, History, Science, Buddhist and Tukaram and Dnyandeo Adhyasan. Resently have M.A., M.Phil and Ph.D. program.

Proposal:

Need to fill up faculty positions and additional non-teaching staff.
Process is on to change syllabus. New Certificate courses in Bio-Ethics, Environmental ethics, Professional Ethics and Business Ethics are planned.

Department of Law

LL.M. course is run with intensive international assessment with regular discussion, tutorials, workshops and weekly seminars. The present course is ranked 5th from Commonwealth Countries. Many students from Nepal, Iran, Iraq, Thailand and African Countries join the course every year. Department offers optional courses. Invites eminent personalities to the department for interaction with students and faculty.

Proposal:

Requires additional classrooms, Library, and other infrastructure facilities.
New course structure with dissertation
Diploma Courses in contemporary, national and global relevance
Propose to have appointment of professor Emeritus, Adjunct professor and Visiting Professor.
Propose to start training courses for Police, Industry, Administrative staff and NGO
Collaboration with national agencies relevant to Law.
Introduce/upgrade course contents.
Requires annual budget of Rs. 16 lac.

Department of Politics and Public Administration

Teaching and research in political process in India

Proposal:

Course may be oriented to fieldwork and work experience.
Certificate course in political journalism, social actions and NGO
Need teaching and non-teaching positions.
Deputation of college teachers to university
Exchange and collaboration with national Institutes and NGO
Activate IDS in Social Sciences
Better management of M.Phil. program in Humanities and Social sciences.

Department of International Students Center

Nodal agency for International Students admission and eligibility.
All proposals of MOU(Memorandum of Understanding); to be handled by the International Students Centre. The International Students Centre is therefore an administrative body, which is part of the University administrative structure.

Academic

ELICIS programme, which is self-supporting and extremely popular
Calgary TAP, which has been running successfully for the past 10 years
European Union Asia Link Programme, which has been in place for two years
Atlas of Student Mobility – research proposal submitted for Central Government assistance

Proposal:

Increase the number of short-term courses offered. Increase duration of the ELICIS courses from 4 to 6 months.
Provide more space, office and classroom, for running new programs. Set up the Center for International Studies (which has already been sanctioned by the University of Pune Management Council)
Contractual positions extremely necessary, for both teaching and non-teaching posts
Allow the Director to extend / renew existing contracts in consultation with the Apex Advisory Committee. As the courses run are self-supporting, finances need not be a major problem.

Set up the Center for International Studies
Introduce more short-term courses for foreign students
Provide for a certain level of financial autonomy for specific requirements of the ISC
More administrative and financial autonomy required for the Director
ISC staff must be given training in speaking English, as they have to deal with foreign students all the time.
Counseling for non-teaching staff, to enable them to deal with foreign students, and to be able to handle the admission rush. Crèche facilities for staff with young children

Separate building for office of the ISC. Separate building for classrooms (lecture room complex) for courses at present running, and to be introduced in future. Provision of space in office complex for visiting faculty / dignitaries

Building to be centrally air-conditioned, Provision for utilization of part of the funds generated through ELICIS for specific ELICIS requirements, Adequate parking facilities near the building
Set up LCDs / sound systems in every classroom, and building as a whole
Medical insurance to be provided as soon as the students pay (at present, students get the insurance only when they are returning to their countries)
Classroom personal lockers for students
Computer room with Internet facilities
Conference room / seminar hall for group activities
Room for co-ordinators of the courses, Staff room for faculty members
Availability of water purifier, tea, coffee vending machines, refrigerator
Fully equipped hall for cultural activities big enough for 500 students
E-facilities for online teaching, Access to Jaykar Library to be provided
More rooms in hostels for ELICIS students, Sports facilities, indoor and outdoor, for students

Foreign Students Requirements

Appointment of a bank employee at the ISC for collecting fees
Money exchange rate mechanism present at ISC
Resident manager to look after hostel complex
Improve facilities in existing hostels
Separate accommodation for married students
Provide big washing machines of 10kg load in hostels
Provide small refrigerators in each hostel room
Provide central air-conditioning in hostels
A separate reading hall with library and internet facility in hostels
Provision of cafeteria/ canteen providing hygienic food of international standards
Improve medical facilities for foreign students
Increase and improve the security standards
Green vehicles shuttle service from hostel to gate and return, especially after 6.00 PM.

Office requirements

Smart card access to ISC building,
Reception area for visitors (including place to sit and wait)
More space for office
Facilities for purchase of application forms at office
Facility for notarization
Offer more short-term courses for foreign students
Vehicles for officials and guests (minimum 1 car and 1 two-wheeler) for ISC

Department of Sanskrit and Prakrit Languages

Department conduct M.A. in Sanskrit, Ardhamagadhi, Pali, and Bhuddhist literature and M.Phil in Sanskrit and Pali. Self supporting courses, Junior Diploma and Higher Diploma in Sanskrit, Ardhamagadhi and Pali. And Ph.D. in Sanskrit, Ardhamagadhi and Pali. Number of research projects are in progress.

Proposal:

Teaching courses are proposed in the areas such as Shaivism, Ayurveda, Jainology and Vedanta Schools and research program in Buddhist Literature.

Need 5 faculty positions and 4 non-teaching post. Requires teachers in Chinese, Jainism, Tibetan etc. Proposes to have fellowship to students.

Additional provision for contributory teachers and International scholars.

Propose to have integrated M.A./ M.Sc. Courses.

Requires additional building/ space for the department.

Department of Marathi

Department have expertise in areas of languages and literature.

Proposal:

Propose to start courses in Translation studies, Manscriotology, Proof Reading, Book Publishing and Teaching Marathi as second language. Needs 5 non-teaching positions and three faculty posts.

Develop exchange program with other universities and institutions from India and Abroad. Training for administrative staff.

Requires additional classrooms, seminar room etc.

Department of English

Large numbers of optional courses are offered to the M.A. students. A course on Film Studies. Students are encouraged to make presentation. Department have exchange program with German university.

Proposal:

Need major syllabus revision. Lack of space and basic infrastructure facilities.

Develop exchange program with Indian and Asian Universities.

Short term course for Industry, technical writing, English for science and Film studies. Web based on-line courses and consultancy services. Propose to have course in English for non-teaching and administrative staff.

Lalit Kala Kendra (Gurukul)

Traditional Gurukul pattern been implemented in imparting training in the field of dance, drama and music. Department have innovative syllabus, transparent evaluation, dedicated Gurus and contributory teachers. Developed collaboration with National and International organizations. Developed collaboration with Arya Sangeet Prasark Mandal headed by Pandit Bhimsen Joshi.

Proposal:

Propose to start various course such as Documentation in Performing Arts, performing Arts medicine, Computers in performing Arts, Theatre performance Music etc.

Research in Carnatic and Hindustani Music Traditions,

Requires faculty , technical and administrative positions.

Would like to develop academic program with major IT organizations for skill in Music and theatre. Center propose to have close link with TV serial or films.

Requires additional budget for its various activities and basic infrastructure.

Krantijyoti Savitribai Phule Women's Studies Centre

One of the first and only teaching Centre having five course, 4 for Post Graduate and one for under graduate.

Proposal:

Propose to start M.A. M.Phil and Ph.D. program in Gender and development Studies.

Requires three faculty and two non-teaching posts. Would like to have positions for Emeritus professors, contributory faculty. New short term course proposed includes Certificate Course for State Bodies and NGOs. Collaboration with South Asia, and similar center from India. Requires additional space and related infrastructure.

Annexure – 6 (Unabridged and Unedited)

**The Campus Master Plan
Planning for physical infrastructure for
Scholarship, Innovation, Creativity**

**Planning for physical infrastructure for Scholarship, Innovation,
Creativity**

Goal:

Create a conducive ambiance and infrastructure that would aid in boosting **scholarship, nurturing innovation** and triggering creativity to meet the challenges of Year 2020.

Strategy:

Transform and scale-up present landscape, physical infrastructure, academic, administrative and residential complexes and manage natural resources by suitable, planned and time-bound strategy.

Initiatives:

To meet the challenges of year 2020, there is need for radical change (short-term and long-term) and revision of campus facilities for which following major initiatives needs to be undertaken. Following are the major areas that are addressed though they are not exclusive but are priority areas.



1. Natural landscapes:

The natural landscape plays a very important role in boosting scholarship, nurturing innovation and triggering creativity. The vision 2020 plans

for 60% green areas and restriction of constructed areas to only 40%. The present constructed areas need to be reorganised to reduce increasing pressure to accommodate newer programs undertaken by the university. The following major recommendation on the landscape have been suggested.

1.1. **Extension of present ‘Botanical Garden’** to across the road, to create a botanical garden which will serve the purpose of education to the educational institutions and citizens of Pune. It will be a centre of great education to the masses about the world of Botanical Science. This will serve the purpose of creating ‘value added green pocket’ with great social cause. This Botanical Garden that would be spread between the present Dr. Parulekar Bhavan, Departments of Geography, Geology, Wrangler Paranjpye building, Kher Vangmay Bhavan, Dr. Ambedkar Bhavan, Refractory, Department of Chemistry, Jaikar Library, Department of Zoology, and Botany and will harbour unique botanical richness that represents plants from tropical part of India, especially the Western Ghats and will be managed by the Department of Botany.

1.2. **Beautification of Shri Chatrapati Shivaji Statue area at the entrance of the University:**

The present landscape around Shri Chatrapati Shivaji Statue needs to be up-scaled to get better visibility so that this place becomes a sight of great inspiration to the students, faculty and visitors of the University. Very carefully designed formal garden could be created with inspiration as a theme.

1.3. **The Conversion of University hill as a Nature Recreation area:**

University is bestowed with a beautiful hillock on the South-eastern side, behind the students hostel (no. 1,2,3 and 4). This is a beautiful natural sight from where the aerial view of the University campus is seen. We can also see the major portion of western Pune. There is great scope to modify this region and make it beautiful ‘Nature Recreation Site’ that can be used by students and teachers of the University.



1.4. **Important of existing ‘Green Areas’:**

Present Green areas other than the mentioned above, have been dominated by plant species like *Dalbergia melanoxylon* (Patangi), *Gliricidia sepim*, *Acacia spp.*, etc. that becomes dry by late winter. Even though Britishers have originally brought the species like *Dalbergia melanoxylon*, which could grow in water-scarce dry campus and was well suited to the then British landscape, now due to considerable modification of landscape these species are becoming less suitable. The campus also looks very dry in the summer. Therefore the entire green areas of the campus needs to be modified by careful selection of species so as to create more greenery at the same time enriching floral and faunal biodiversity. The species like Neem, *Pongamia*, Banyan tree, *Cassine glauca*, *Memecylon*, *Diospyros embryopteris*, *Acrocarpus*, *Saraca asoka*, *Michelia champaka*, *Thespesia*, *Delonix regia*, *Bauhinia*, *Putranijiva*, *Pandanus*, *Butea monosperma*, *Jacaranda*, *Ailanthus*, *Adansonia digitata*, *Adathoda vasica*, *Cassia spp.* etc. could be planted.



The areas close to Khadki Gate, which is a fairly dense green zone, would slowly be improved to develop a 'Medicinal Plant Park' and a Palm Garden, which would be again the extension of the 'Botanical Garden' and would serve as a site of awareness, education, research and recreation.

The existing green patch within the triangle extending from Kothi gate to hostel no. 6 and teacher's quarters (P and Q) and also behind the teachers quarters (E to M) would be developed as woodland that would represent tall tropical trees.

The plantation of species like Neem and *Ficus spp.* would be taken on a mass scale. The open areas along the present Jogging Track, open space near SET Guest house and Dhobi Ghat and open area close to the University School and behind non-teaching staff quarters would be planted with Neem to create greenery. About 10000 saplings of Neem would be planted with large number of *Ficus* trees.

1.5. Green Belt development:

Due to the widening of the university road, the stretch entering from Main gate to Kothi gate, most of the university buildings along the road are exposed to sound and dust pollution. There is need to create a thick green belt all along the wall of these buildings that will act as noise and dust barrier and at the same time block the visibility.

1.6. Formal Garden:

Minimal number of buildings will have formal gardens so that the maintenance cost will be reduced. Very small sized formal gardens can be developed around teaching departments and administrative blocks.

1.7. Needs for 'Recreational Areas':

At the moment there are no formal recreational areas except for the Ellis Garden, the garden opposite old canteen, which is maintained by Parks and Garden Dept., Govt. of Maharashtra and formal garden around university Main Building. The major gardens proposed, will have proper sit-outs, walkways, wooden bridges, pebbled paths, waterfalls, which will help to create better aesthetic ambience at the same time serve as good discussion areas for students and researchers on the campus. Areas around the most of the large trees such as Banyan tree



and Baobab-*Adansonia digitata* tree would be developed into nice site-outs and would be converted into "Schollars' Kattas".

2. Vehicle mobility:

The goal of this exercise is to make campus most environment-friendly by reducing vehicular traffic. The parking of all vehicles coming from outside would be restricted to **special parking zones** created near all major entry gates. Inside campus mobility would be through 'Electric **Vehicles**' and '**Bicycles**'. There would be university operated electric vehicles plying on the **outer rind road**. There would be aesthetically designed

‘Vehicle Stops’ at important cross roads. People would be encouraged to walk to their respective destinations. The vehicle mobility would be planned in such a way that no commuter would have to wait for more than three minutes. The vehicle parking zones would be developed at following locations:

- Near Main gate
- Near Khadki or General Joshi Memorial gate
- Near IUCCA side gate
- Near Kothi gate
- Near Millennium gate



The parking shades and the roofs of the bus stops would be embedded with ‘Solar Photovoltaic Cells’ so that these areas are lit with solar power.

Bicycle tracks:

For the safety of bicycle commuters on the outer ring road, special bicycle tracks would be created.

3. Campus Service Centres (CSC):

The campus community requires large number of services both for academic purposes and for residents. It is proposed that two such centres would be designed.

3.1 CSC 1: Central Multi-facility Centre: This centre would be designed in triangular open garden space located in front of present refectory. This area is centrally located to the major academic hub. This centre would cater to the academic support needs of all departments, teachers, students, researchers etc. This would be equipped with following facilities.

- **Net Browsing:** For providing internet browsing facility at nominal cost to the registered students and teachers and authorised visitors
- **Patent Parlour:** To access patent databases of major patent offices like Indian Patent Office, US Patent Office, European Patent Office, World Intellectual Property Organisation etc. This would be central facility that would help a lot to

students and faculties involved in research. This would be made available to the registered students and faculty of university of Pune.

- **General Facilities:** This centre would also be equipped with facilities like photocopiers of all sizes: colour and black and white and scanners, plotters, bindings machines, communications etc.

The central multi-facility centre would support to all the departments to organise various events like seminars, conferences, workshops and also produce good quality documents, brochures etc

3.2 CSC II: Campus Facility Centre: A special complex would be developed at suitable location, possibly at present Datto Waman Potdar Complex. This complex is having a right design to set up such a centre. This centre would have facilities such as publication

- Shopping mall
- University publications' Shop
- Book stores
- Food courts
- Various kinds of vending machines

A part of this area would also be developed as a '**Students Recreational Areas**'. The present old canteen would also be a part of this complex. There is advantage of having this complex here since the two major gardens namely Ellis Garden i.e. garden opposite to old canteen and the garden around the Main Building are nearby. Even the 'Open Theatre' of Centre for Performing Arts is in the vicinity; also the oldest and beautiful banyan tree is nearby.

4. Policy for Constructed Areas:

The overall distribution of various Administrative and Academic Departments on the campus would need careful planning to meet future academic needs and demand. Globally clustering approach has proven to be very useful for the academic growth. At present there is good cluster of Arts and Humanities in the form of Kher Vangmay Bhavan and Dr. Ambedkar Bhavan. The Life Sciences Departments are placed far apart, the Management Science and other related Departments like Economics, and Political Sciences etc may have to be brought together.

For cluster conducive academic growth there is a need to make some rearrangement of departments so that faculty and resources are better utilized and students have better interaction and access for resources.

5. Efficient Use of Old Buildings

On the campus there are a lot of old buildings that are either used as quarter, officers etc. This has led to wastage of space and problems of maintenance. These building could be either demolished and space could be used for other purposes, especially for new hostels, residential blocks or even to locate some of the departments. As a policy there is need to maintain maximum green area in the core central zone. We would plan high-rise buildings in the peripheral region outside the 'Ring road'. No high rise building be allowed in the central core

6. Management of Waste:

The campus activities generate two kinds of waste:

- Solid waste
 - o Biodegradable
 - o Non-biodegradable
 - o Hazardous waste
- Liquid waste
 - o Sewage
 - o Chemical waste

Following means would be adapted immediately for dealing with the waste

6.1 Solid waste:

- o ***Biodegradable waste:*** Campus generates considerable amount of biodegradable waste both in form of litter and domestic sewage. This would be used to generate vermicompost and the entire compost would be used for garden development so that we do not loose the precious organic manure.
- o ***Non-biodegradable waste:*** This waste would be collected properly and handed over to a suitable agency for disposal. Mainly this waste contains glass, metal, thermocol, plastic packaging material, e-waste, paper etc.
- o ***Hazardous waste:*** This needs to be disposed off carefully. On campus, hazardous waste consists of hospital waste, sanitary napkins, biological, microbial culture

waste, waste from tissue culture labs, test animals/tissues, etc. This material would be collected scientifically and send to corporation for incineration.

6.2 Liquid waste:

- **Sewage:** The campus has two natural drainage areas. Two low-lying areas one downstream of Khadki gate near Dhobi ghat and another behind Hostel number 6. Two separate effluent plants would be set up to treat sewage. The treated water would be used for greening.
- **Chemical waste:** Substantial amount of chemical waste is generated from the “wet laboratories” especially from the departments of Life Sciences, Chemistry, Environmental Sciences, Geology etc. At present this waste goes untreated. A separate pipeline would be laid to collect this waste and a common Effluent Treatment Plant (ETP) would be set up for the treatment.

7 Management of eating joints:

At present there are about seven eating joints on the campus and the conditions are not hygienic, and except two, all other are run into temporary makeshift shades. All eating joints will be reorganised, properly designed and modernised. There would be only two major eating joints instead of presently seven. Those would be located at



a. The proposed multi-facility centre located in Potdar Sankul and

b. By modifying and updating present Aniket Canteen and refectory

Other than these major eateries, all major departments would have vending machines either managed independently or by these two major eateries.

8. University Information Centre and PRO Office:

For the convenience of students, teachers and citizens and to showcase the activities of the



university a new and modern '**University Information Centre**' would be set up.

This would be located close to the Main gate of the University and close to the parking area. The area of present quarters located close to the main gate could be demolished to construct a well-designed modern building. This centre would be managed by PRO office and would provide all the information to the

students and parents. This office should also handle admission related work and also be equipped with Banking facilities and a small cafeteria.

For access to this centre a special exist gate can be provided that links to VMICOM road to avoid traffic congestion.

9. Other Miscellaneous Development area:

- **Public conveniences:** At present there are no adequate public toilets on the campus.

Well-managed public toilets at important locations like:

- a. University Information Centre:
- b. All eating joints
- c. Multi-facility Centre
- d. Recreational areas

Would be constructed.

- **Signages:** There would be a policy for putting signages. This policy would cover all kinds of signages for Departments, Common places, Roadsides, Conferences and Seminars and the size, shape, colour of signages etc.

- **Safety and security:** The public access to campus must be regulated to manage and maintain this huge academic campus. Every department would have digital access control. The entire campus needs to properly illuminated during the night and needs to be well guarded.

- Other services such as parlours, laundry services etc.

10. The facelift of present academic and administrative buildings:

To create a proper learning environment there is need to facelift almost all campus buildings.



Administrative blocks needs to be modernised. All buildings needs well upkeep and planning, there is need to modernise classrooms,

audiovisual aids needs to be fitted in each and every classroom. Every academic department must have proper reception area and visitors lounge, students and parent counselling centre, good reading room, modernised laboratory etc.

18. Energy:

The energy budgeting for entire campus would be done to conserve and utilise energy efficiently. Almost 40% of energy requirement would be met by non-conventional energy sources like solar and wind. Entire lighting would be based on energy efficient lighting devices like CFLs, LEDs etc. so that consumption is substantially reduced.

Attachments:

1. Figure 1. Present campus layout
2. Figure 2. Proposed campus layout