Institutional Development Plan

SUBMITTED TO

Swami Ramanand Teerth Marathwada University, Nanded

Submitted by

SCIENCE COLLEGE, NANDED

(Affiliated to Swami Ramanand Teerth Marathwada University, Nanded)
(NAAC Re-accredited "A" grade CGPA 3.38, Recipient of DST-FIST, CPE Status)

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Vision of the College/Institute/School/Department

Keeping the mission of Nanded Education Society in view, the founders of the society established separate institutions for primary, secondary, and college education. These institutes were set up to cater to the educational needs of backward region of Marathwada.

With the major objectives of Nanded Education Society based on need of science and technological education for backward region of Marathwada, NES Science College, Nanded proceeded to usher in the educational revolution in the region. The founders and constituents of college envisaged following set of the generalized and specific goals for the institution.

1. To provide higher education to the youths of backward region of Marathwada in particular and Maharashtra in general.
2. To impart science and technical education to youth of this region.
3. To catalyze the development of enlightened and responsible citizens of secular democratic India.
4. To cultivate the spirit of the service of the people in students receiving instructions in this institution.
5. To develop the sense of service and belongingness towards the suppressed, downtrodden and exploited people of this region.
6. To educate the students to touch the life at all points with human values.
7. To develop and evolve the student's personality with freedom to develop their own views without prejudice and free from all "isms".

In view of changing scenario of higher education at national and international levels and advancing frontiers of science and technology this institution has reviewed, contemplated and redesigned the goals and tried to give them a new orientation and additional dimension but keeping the core human values intact. These goals are as under.

GOALS:

i. To provide ideal academic atmosphere for the pursuit of excellence in higher education.

ii. To introduce new restructured and vocational courses to keep pace with evolving standards of professional competence.

iii. To impart in-depth knowledge and expertise through innovative methods of teaching and learning so as to create a pool of resourceful, self motivated scientific manpower.

iv. To prioritize good governance and high ethical standards at institutional level.

v. To promote high quality research stressing the regional needs and social relevance.

vi. To nurture the research activities for academic nourishment, updating and fostering of scholastic temperaments.

vii. To organize extension activities for community development focusing on civic responsibilities, social awareness and value based education.

viii. To provide a forum to promote the broader interaction among scientific, social, cultural community by organizing exhibitions, workshops, Seminars, Symposia, conferences and other relevant deliberations.

ix. To impart broad-based knowledge to face current competitive world.

x. To make higher education relevant to knowledge age.

Mission of the College:

The aims and objectives as envisaged in the memorandum of association of Nanded Education Society, Nanded as adopted in the year 1950 reads as under:

"The aims and objects of the society shall be to start and takeover educational institutions and to supplement the educational endeavours of the Maharashtra state by imparting to the youths of this state generally and Marathwada particularly, an efficient primary, secondary, technical and

university education, with a view to infusing in them the spirit of enlightened and responsible citizenship, worthy of a secular, democratic state. To this end the society shall open and takeover institutions and shall take other steps as may be most conducive to the attainment of the aims and objects".

Details of SWOT Analysis

Strength

- ➢ College with 72 years of footing and with 45 acres of land ample scope for expansion.
- ➢ Participation of faculty in management.
- ➢ Qualified faculty with academic excellence actively engaged in research.
- ➢ College has been recognized by DST under DST-FIST programme for financial assistance.
- ➢ UGC has conferred "College with Potential for Excellence" (CPE) to institute.
- ➢ Students and faculty participate at various conferences, seminars and workshops.
- ➢ Academic flexibility for subject combinations at UG, PG and Ph.D. programmes.
- ➢ College is at forefront in organizing conferences, seminars and training programmes.
- ➢ College accredited with "A" grade in third cycle by NAAC (CGPA-3.38 in 2017).
- ➢ Central Instrumentation laboratory facility caters to local and regional needs of the society for research work.

Weaknesses

- ➢ Less Industrial development in Nanded and adjoining area has limited scopes for industrial linkages.

- Government has stopped non-salary grant which has created financial constraint in development.
- Government inability to full fill the required teaching and non teaching staff which has hampered the sustenance of quality education.
- Library expansion is hampered due to lack of financial support.
- Renovation of old building needs financial assistance.

Opportunities

- College has applied for National Institutional Ranking Framework (NIRF) of HRD Ministry and hopes for good ranking.
- College hopping to strive for academic autonomy due to its excellent NAAC grading.
- Being single faculty Science College, it has an opportunity to became hub for scientific research with the support of DST to compete with global academic standards.

Threat

- Learners have less interest for higher education because they are from socially and economically backwards region.
- Less employability of students due to paucity of industrial setup.
- Inadequate funding from government affects the ambitious projects of the college.

Long Term Goals (5 to 10 yrs)

i) To apply for Autonomy to the college.

ii) To convert the college into mini University.

iii) To introduce professional courses.

iv) To establish international linkages.

Short Term (1 to 5 yrs)

i) To introduce certificate/short term courses.

ii) To construct separate library building.

iii) To construct roads in the campus.

iv) To establish incubation and innovative centre.

v) To update laboratories.

1. **Action plan for Scaling-up Enrolment of students for UG courses**

   ➤ Advertise is given to the local news paper for admission process to attract students and parents for admission.

   ➤ Prospects are given to students which coexist of college information about infrastructure, teaching learning tools, research and different facilities.

   ➤ New PG courses are introduced to attract students along with Diploma and certificate courses.

2. **Action plan for Scaling up Enrolment of students for PG programmes**

   ➤ Students at PG level are enrolled on merit basis as per university calendar.

   ➤ Govt. reservation policy is considered during students enrolments.

   ➤ The institute offers PG programs in the specialized areas of Chemistry, Botany, Zoology, Physics, Mathematics, Applied Mathematics, Microbiology, Computer Science, Herbal Medicine, Biotechnology and Statistics.

   ➤ Research activity is increased to attract students to enroll PG students.

   ➤ PG Courses are run with demand of society and industry.

3. **Action plan for introducing new program/courses**

   ➤ New certificate and B.Voc. Courses started as per the needs of local community and students interest.

   ➤ New courses started to gain knowledge, skills and credentials in high demand.

   ➤ New courses started which will help to get placement and employment to all students.

   ➤ Basic facilities halls/ labs provided for teaching learning process.

- Department of Fishery, Computer Science. Sports started certificate courses which increased opportunities in getting jobs to the students.

4. **Action plan for strengthening of UG/PG programmes/ Ph.D. program**

- ICT are effectively used in teaching and learning process.
- Skills are inculcated in the students according to the courses so that they get employment.
- Well furnished and equipped labs are provided for students to carryout experiment.
- Central instrumentation lab facility are provided to the Research students and PG students for completion of their project.

5. **Action plan for alumni engagement**
    Alumni engagement is an essential aspect of building strong relationships between colleges and their former students. Here's an action plan for alumni engagementactivities in colleges

    1. **Delineate Objectives**: Determine the activities involving alumna meter contribution to achieve with alumni engagement program. The objectives could range from promoting the college, networking opportunities, fundraising, mentorship, or career development, among others. Defining these objectives will guide the overall strategy and tactics for engagement.

    2. **Create a centralized alumni database**: It's critical to have accurate and current information about alumni in order to engage with them successfully. A centralized alumni database can be used to gather, manage, and preserve details about alumni, including as contact information, employment statistics, and interests.

    3. **Fundraising** is a crucial component of alumni interaction, thus College encourage alumni to make financial contributions towards **Student Facilitation Centre**through. Donations, sponsorships, and endowments.

4. **Create a mentoring program**: Mentoring programs are a great method to connect with alumni and provide current students the chance to learn from the knowledge and experience of their former classmates

5. **Create opportunities for current Students:** Offer opportunities for current students by alumni through the conduct of **Campus Placement Drive at College** this can help alumni feel more connected to the college and its mission.

6. **Host alumni events**: Host events such as reunions, homecoming, networking events, and professional development seminars. These events will give alumni an opportunity to connect with each other and with the college.

7. **Appraise and acclimate**: Continually assess the success of alumni engagement initiatives and make adjustments in response to alumni comments, may create new opportunities.

Alumni engagement is an ongoing process. It requires consistent effort and attention to keep alumni connected to the college and engaged with its mission.

6. **Action plan for student placement**

Developing a comprehensive action plan for student placement in college is to ensure that students are equipped with the necessary skills and knowledge to secure employment opportunities. The ultimate goal of a placement cell is to ensure that students find suitable employment opportunities and launch their careers successfully.

Here's an action plan for to facilitate student placement in college.

1. **Develop Training and Skill Development Programs**: To improve students' employability, training and skill development programs will be developed. Through Workshops, seminars, and short-term courses

concentrating on soft skills, technical abilities, and industry-specific skills may be included in these programs.

2. **Create a Resume Database**: To share with prospective employers, the placement cell will keep a database of student resumes. The resumes will be periodically updated and will feature the student's abilities, academic success, and extracurricular pursuits.

3. **Recruitment Placement drives** is going and will be held on campus so that students may speak with industry person & gets miniature of Industry, students are interview them. These campaigns will be held all year long and open to students in all academic fields.

4. **Improve Industry Corporations:** College will collaborate with top MNCs and organizations across industries to give students the finest career possibilities available. These collaborations may assist students find networking opportunities, internship chances, and jobs.

5. **Career Orientation Among Students :** As industrial recruitment takes place regularly for every six months , to face the interview and how to write or attempt paper career orientation will be done with respective to their disciple

7. **Action plan for enhancing ICT based teaching learning process and infrastructure**
   ➢ PPT, overhead projector, internet are regularly used by faculty for effective teaching and learning.
   ➢ e-books, e-journals are available in the library.
   ➢ Video lectures are provided to the students.
   ➢ Matlab, R-Software, LATEX, SPSS, Skylab, Mathcad, Chemdraw etc are available in the department for effective learning.
   ➢ Four halls are converted into smart class rooms for effective teaching and learning process.

- ➢ On campus Wi-Fi facility for faculty and students.
- ➢ Research scholars avail the facility of central instrumentation lab to pursue their research work.
- ➢ Smart classrooms are available in college.
- ➢ Internet resource centre is available for online teaching.
- ➢ Students are well trained in Chemdraw, Matlab, Mathematica, Mathcad, SPSS etc. software.

8. Action plan for implementation of skill based and value added courses

- ➢ Every subject skill are inculcated in the students in order to get employment.
- ➢ Hands on training are given to the students to develop skill in students.
- ➢ For all round development of students value based courses are started in the college like Yoga and Nutrition by Sports department.
- ➢ Certificate course of fishery science and computers science started to develop skill in the students.
- ➢ Different workshops are organized for skills and values.
- ➢ Women empowerment programmes are arranged for gender equity.
- ➢ NSS & NCC organizes camps which develop social awareness and patriotism among the students.

9. Action plan for enhancing enrolment of students/faculty for opting online MOOC/SWAYAM Courses

MOOC/SWAYAM/NPTEL provides a platform that facilitates hosting of all the courses in Science, Engineering & Technology, Mathematics, Computer Science, Languages, Biotechnology and so on to impart quality education and taught online in classrooms from class 9th till post graduation which helps in educational quality augmentation. More than 1000+ courses are designed, developed and delivered through SWAYAM/NPTEL in collaboration with IIT's, IISc, ISER, IIM & other reputed professional institutes.

Enhancing Enrolment of students & faculties:

Nanded Education Society's Science College, Nanded is Local Chapter, Nanded and is a partner of NPTEL/SWAYAM, enrolling students and faculties for various courses in different disciplines. Swami Ramanand Teerth Marathwada University has already started Credit Transfer as per the UGC (Credit framework for online learning courses through SWAYAM) regulation 2016. This credit transfer to the student will benefit them in terms of academic scores reflected in their academic record and also enhance their knowledge.

Theses courses are available free of cost to the learners, however learners wanting a SWAYAM/NPTEL certificate should register for the final proctored exam with examination fees of 1000/- for open category and 500/- for reserved. Reimbursement of exam fees at college level/institutional level can be a option for those students from poor background/ those unable to pay the fees.

Many courses are skill oriented courses and practical based. This is beneficial to the students in acquiring jobs/employment. Our college takes initiatives to make them aware of these courses through Seminars, Webinars, Group Discussions in the classrooms.

10. **Action plan for Improving collaboration with industry**

Collaboration with industry refers to the practice of working together with industries or organizations to achieve mutual goals. This type of collaboration can take many forms, including joint research projects, partnerships to develop new products or services, and co-marketing initiatives.

1. **Innovation Initiative**: Collaborating with Industry will help to take innovative work-culture and the development of new technologies that can benefit society as a whole.

2. **Bridge Courses** :Collaboration leads access to industry through academia providing bridge to students

3. **Work Culture:** Work culture of industry is different within its environment, well- being of individuals and communications and attitudes implementation will be done by collaborative work.

4. **Self –Motivated**: College will provide Learning phase to every student, where their inculcate the discipline within their life and from collaboration with industry it could provide platform for implementation phase where their can practically proof them with positive approach with confidence.

The above points are the plan of action for institution development plan for improving collaboration with industry, as college is already having collaboration with industries, providing the students miniature of industries through the academia.

11. **Action plan for Improving Research by Faculty, Developing Research Interest among Undergraduate students and Collaborating with Indian and Foreign Institutions in Academic and Research Area through MoUs**

The following steps will be executed for improving research by faculty development research interest among undergraduate students and collaborating with Indian and foreign institutions in academic area through MoUs

1. **Promote Research Gathering** : As our institution already engaging and will continue in promoting research gatherings through online and offline mode through Conferences and Online/ Offline Guest Lectures

2. **Advance Technology**: for Advancement In research all research scholars and Undergraduate students will be provided by Online Books Facilities through D-links, N-Link List, even research lab facilities are provided.

3. **Developed Research Environment**: Students Exchange and Faculty Exchange from the industry , **Centre of Excellence**, Academics Institutions will be done

4. **Research Promoting Lectures** :where in seminar will be conducted and FDP(Faculty Development programs) will be considered with in India or and Foreign Institutions in academic and Research Area through MoUs

5. **Cluster research Activity** : Research activity with multiple implementation methods and discuss among young researchers, promote in journal article publication

12.Action plan for contribution to Social and Environmental Awareness Activity

1. **Conduct Awareness Seminars**: Seminars will be designed to educate individuals on Social and Environmental enhancement, providing them with important information and knowledge that they may not have otherwise known.

2. **Awareness of E-waste /Solid Waste etc. in society and its prevention**: In order to bring awareness, college organizes state level competition on "Best From Waste" for college and school students. By providing information and education, awareness seminars can encourage individuals to change their behavior and adopt new practices that can improve their health, safety, or well-being.

3. **Implementation of Green Practice**:

College will implement green practices that promote sustainability. This can include initiatives such as recycling programs, energy-efficient lighting, and water conservation measures. Biogas & Vermi-compost units are available on campus.

4. **Eco-System**: Ecosystems are important for supporting biodiversity, providing essential resources, and regulating the Earth's climate and biogeochemical cycles. Protecting and restoring ecosystems is crucial for

maintaining the health and well-being of the planet and its inhabitants. By promoting awareness of Eco-system among students and all stake holders.

13. Institutional Project Budget

➢ Science museum – 1.5 Crore

➢ Library building – 3.0 Crore

➢ Incubation center – 0.50 Crore

➢ Road construction – 1.20 Crore

14. Specific Objectives and Expected Results of IDP

Specific Objectives:

i) To develop infrastructure facility.

ii) To introduce new courses.

iii) To raise financial budget from self financed courses.

Expected Results:

i) Infrastructure facility will be developed in future by considering implementation of NEP-2020.

ii) New courses will be introduced for choice based system and to enhance mobility for benefit of students.

iii) Incubation & innovation centre will be established to have the placement opportunity to the students.

15. Targets against the Deliverables

i) For proper implementation of NEP, project proposal will be submitted to Govt. agencies for financial assistance.

ii) To fulfill the objectives of NEP, more self financed and job oriented courses will be started.

iii) For success of NEP programme proper planning and execution for the project.