# Report of the Peer Team on the Institutional Accreditation of the Gondia Education Society's Dhote Bandhu Science College, Gondia - 441614 Maharashtra

#### Section I: Preface

Gondia Education Society was established in 1958 with the objective of catering to the needs of the educationally and economically backward areas of the then united Bhandara district of Maharashtra. The society runs 12 high schools, 14 junior colleges and 15 degree colleges including an engineering and technology college in the three adjoining districts of Vidarbha: Gondia, Bhandara and Nagpur.

Dhote Bhandhu Science College (DBSC) emerged initially as a faculty of science in N.M. Dalal College, Gondia in 1963. It was established as an independent institution in 1969. It is one of the 15 degrees colleges of the Society. The college is affiliated to Nagpur University and received its recognition by the UGC in 1975 under section 2(f) of the UGC Act. The section 12(B) does not apply to the College. It gained permanent affiliation in 1999.

The College runs on the grant-in-aid financial pattern. It is housed in a fairly spacious building with a built up area of 44886 sq. ft. within a campus of 3 acres of land in urban setting.

Being an exclusively single faculty College, it runs B.Sc and M.Sc. in 5 subjects: Chemistry, Microbiology, Computer Science, Botany and Physics.

The single Faculty of Science comprises ten academic Departments: Chemistry, Physics, Mathematics, Electronics, Computer Science, Computer Maintenance, Botany, Microbiology, Zoology, Languages and a Physical Education Department.

It has 19 permanent teaching faculty members (1 female and 18 male) supported by 46 contributory teachers. Among the permanent faculty members 3 hold Ph.Ds, 3 M.Phil degrees and 3 more teachers have submitted their Ph.D. theses. The college has 88 non-teaching staff of which 35 are administrative and 53 technical personnel.

The College has 795 students (406 female and 389 male) on its UG roll in the current academic year 2003-2004. 22 students hail from other states. The enrolment at the PG stands at 117 (64 female and 53 male) and 14 students come from other states.

The unit cost of education is Rs. 23,536 for the UG in the subjects other than Computer Science. For Computer Science it is Rs. 12,204 and that for the other PG it is Rs. 13,660.

The annual examination system is followed in the institution.

The College has a Central Library, Computer Centre, Health Centre, Hostel for girls, Guest House, housing and other physical facilities.

The Institution has mobilized the recourses to the tune of Rs 22,91,500 through self-financing courses in the year 2002-2003.

The College volunteered for institutional accreditation by the National Assessment and Accreditation Council (NAAC), Bangalore and submitted its Self-Study Report for the purpose in September 2003. The NAAC appointed a Peer Team consisting of Dr. K.D. Vasava, (Former Vice Chancellor, Dr. Babasaheb Ambedkar Open University, Ahmadabad, Gujarat) as Chairman, Dr. Aroon Krishnarao Heblekar, (former Principal, PES College of Arts & Science, Goa) as member and Dr. H.M. Rajashekara, Professor & Director, UGC Academic Staff College, University of Mysore, (Karnataka) as Member – convener. The pre-visit assistance was ably provided by Dr. M.S. Shyamasundar, Deputy Advisor, NAAC.



The Team visited the College on 27<sup>th</sup> and 28<sup>th</sup> January, 2004. The members had independently scrutinized the SSR as a Pre-Visit exercise and held meetings with the principal, members of Governing Body and Local Managing Committee, teaching and non-teaching staff. The team interacted with parents, alumni and representative groups of the students and visited the entire academic complex and physical facilities.

Based on above exercise and on the spot verification of documents the Team records the following observations:

Section II: Criterion-wise Analysis

Criterion 1: Curricular Aspects

The College offers B.Sc. programmes with 7 combinations of 3 subjects each to the students. The combinations are: (a) Physics/Chemistry/Mathematics, (b) Physics/Mathematics/Computer Science, (c) Physics/Mathematics/Computer Maintenance,

(d) Physics/Mathematics/Electronics, (d) Chemistry/Microbiology/Zoology,

(f) Chemistry/ Microbiology/Botany, (g) Chemistry/Botany/Zoology.

The subject of Computer Maintenance is a UGC sponsored vocational programme.

2 year PG programmes in the subjects of Computer Science, Microbiology, Chemistry, Botany, Physics are offered in the college.

At the UG level Microbiology, Computer Science and Computer Maintenance are career oriented courses, whereas at the PG level all the five options provide career openings to the students.

Computer Science programme at UG level and all programmes at PG level are offered on self-financing basis. Three Departments: Computer Maintenance,

Computer Science and Microbiology have developed modular curricula and indigenous courses.

The College being an affiliated Institution, the teachers do not have a direct role in curriculum design and modification. However it seeks the feedback from the peers in the University and employers about the courses and these inputs are used to improve the structure through Boards of Studies of the University. During the current year only two teacher serve on the BOS.

The College has established links with the agro based industries in the area. It has developed nine innovative programmes which include pharmaceuticals, biofertilizers, environmental education, electronics, computer operations, and oyster mushroom cultivation.

### Criterion 2: Teaching-Learning and Evaluation

The students are admitted to various programmes through academic records and interviews. After admissions the students are assessed through unit tests, seminars, group discussions, viva voce, home assignments, and general tests.

Remedial coaching is provided to the weak students and advanced learners are given additional library facility, seminars and group discussions and innovative projects as incentives.

A teaching plan is prepared at the department level by the teachers and is regularly monitored. The traditional teaching method is supplemented by the audio/visual aids, posters, charts and working models.

The College follows 240 working days of which the teaching days are 180. The ratio of full time teachers to contributory teachers for the last two years is 21:24 and 19:46 respectively. The ratio of Teaching staff to non-teaching staff for the last two years is



21: 49 and 19:88 respectively. Nearly 55 percent of the classes are engaged by the permanent faculty members.

The evaluation methods are communicated to the students and their guardians in the beginning of the academic year.

The teachers are recruited as per the provisions of the UGC and state government. The College has freedom and the resources to appoint staff provided that they have UGC qualifications on contributory basis.

15 teachers have participated in the National level seminars /conferences/ workshops/ symposia and 4 have participated in the international seminars/conferences. The teachers' performance is evaluated by the self appraisal method.

The College has organized in all one national level seminar and three state level seminars/conferences/workshops during the last three years.

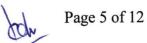
Various Departments have organized visits to different institutions in the state. UGC has selected the College for the internet connectivity grant. It has conducted exhibitions for the students and has been running a vocational course granted by the UGC for the last five years.

Besides, almost all Departments have evolved a system of organizing a series of lectures of prominent scholars.

# Criterion 3: Research, Consultancy and Extension

The College promotes research in several ways.

The PG students engaged in project works are provided with library, laboratory facilities, materials required, computer, internet, stationery etc.



Under IX th plan two teachers have been given study leave under the faculty improvement programme. Other facilities as per the UGC norms are made available.

Two Minor Research Projects with a total out lay of Rs. 75,000/-, one in Microbiology and the other in Mathematics, have been completed.

A few teachers have published articles/research papers in recognized national level journals.

The students are involved in extension activities like community development, social work, health and hygiene awareness, medical camp, adult education and literacy, blood donation camp, AIDS awareness, environmental awareness, work experience project under adult and continuing education. Most of these are undertaken by NSS volunteers. NSS volunteers have organized a street play with a social organization of Wardha.

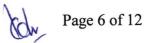
The College has collaborative extension activities undertaken with NGO s. 5 villages have been adopted for the NSS activities.

## Criterion 4: Infrastructure and Learning Resources.

The College has specific plans to meet the growing needs of the institutions by improving and expanding the present infrastructure.

A committee of teaching staff looks after the maintenance of the premises. Maintenance of computers is done through Annual Maintenance Contract. The College premises besides being used for the institutional regular and extra teaching activities, are provided to other agencies also.

The College has promoted various movements/campaigns like polythene free campus etc, to maintain the campus clean and pollution free.



A library committee looks after the functioning of the library. The college library has 33,523 books (text books 19,515 and reference books 14,008). It has 11 journals, 28 periodicals, 20 dailies, and 275 CDs containing books and journals. It has well furnished separate reading rooms for UG and PG students. Purchase of books, stack verification, accession, cataloguing and lending of books are the activities which are computerized. The library has reprography, computer, audio-video cassettes and it uses internet facilities, available in the computer science department. The library working hours are between 8.00 a.m. and 6.00 p.m. on all week days. In addition, each department has created its own departmental library.

There is a Computer Centre having internet connectivity to cater to the needs of students. 10 in-house software programmes have been developed by the Computer Centre. It has also encouraged the students to carryout work experience projects. All departments in the College have computer facilities. The College has developed a few software for various studies and tasks including Controlling Robot Movement through Parallel Port of PC.

Two doctors employed on a part-time basis for boys and girls, visit the Health Center regularly.

The College has a cafetaria and Employees' Credit Co-operative Society. It has a play ground of 130 X 90 sq. yds. area, and has courts for volley ball, hand ball and a multigym shared with the junior college. A few sports students have participated in volley ball, ball badminton, basket ball, hand ball and kabaddi at State level, whereas two students participated in net-ball and cricket at national level. The college encourages the students to participate in sports, cultural and academic activities through Manoharbhai Patel Academy (NGO).

Hostel facility for girls is provided. The College also has loan facilities, and welfare schemes for teachers and students. Grievance Redressal Cell is set up for the benefit of both students and employees of the college.

#### Criterion 5: Student support and progression

About 80 percent of the students, out of the total admitted appear for the examination. The dropout rate is approximately 20 percent. Progression to higher studies is only 20 percent to PG and 5 percent to research.

The College has an Alumni Association which meets periodically and participates by giving various suggestions to the College and help it in its activities. Some of the alumni have occupied high position.

The College publishes its prospectus annually, which contains information regarding admission procedure, courses of study, fee structure, examinations, scholarships etc. It facilitates transparency in admission. Different types of scholarships available under Government schemes are made available to the students. Nearly 50 percent of the students get one or the other type of scholarship.

The College has an Employment Cell and one of the faculty members holds an additional charge as a placement officer. The cell motivates the students to get self employment, guides them for competitive examinations and gives them information about employment opportunities.

The College uses various media including the website for making the policies and procedures of admission known to the prospective students. It provides facilities for nature clubs, debate clubs, cultural programmes, audio/video facilities, dance, music competitions, essay writing, quizzes, etc.



### Criterion 6: Organization and Management

The College is managed by GES, which is a registered body. It has a Governing Body, Executive Committee, Co-ordination Committee. There is also a Local Management Committee (LMC) constituted as per the provision of the University Act, which manage the day to day functioning of the College. Besides, there are several other committees formed for specific purposes. The Principal implements the policies and decisions of the GES and exercises such powers as conferred on him by University Statutes and State Government. He along with HODs and Co-ordinators ensures smooth functioning of the College. The work efficiency of the staff is assessed through self appraisal and Annual Confidential Reports. The non teaching staff has been trained in the use of computers periodically.

An external agency was involved to study the working of the institution. It has offered several suggestions for the improvement in the administration of the institution and also for its developmental activities.

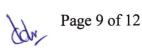
The GES and the local Trusts provide financial assistance to the students mainly in the form of scholarship

The College provides residential accommodation for teachers and loan facilities through Employees Credit Cooperative Society to its members.

### **Criterion 7: Healthy Practices**

The Peer Team identified certain healthy practices prevailing in the college that enhances academic ambience of the institution. These are

> an effective internal quality check through a committee of teacher



- > an external agency, which had given suggestions for overall improvement of the institutions,
- > linkages with the national/state level institutions,
- > introduction of uniform for UG. students, bringing in a camaraderie among them,
- > internet facility without any charge
- > effective use of computer in academic and administrative work,
- > regular periodic assessment through unit tests,
- > remedial coaching for educationally disadvantaged students,
- > inculcation of value education and civic responsibilities,
- > active involvement in socially relevant research by teachers,
- > strengthening of academic program through self financing courses,
- > informal linkages with other institutions/organizations,
- > providing internet facility to the staff and students free of cost,
- > effective use of computers in College administration,
- > adoption of five villages through NSS programs.

# **Section III: Overall Analysis**

During the period of four decades the GES has made efforts in developing DBSC in all respects .Due care has been exercised by the institution in setting academic standards. The College has a potential to attain further heights.

#### Commendations

The Peer Team would like to commend the following:

- Well equipped and spacious laboratories.
- Involvement of an external agency for the academic audit.



- Launching of need-based short duration, indigenous courses, providing job oriented skills to the students.
- Establishment of Study Center of YCMOU, Nasik, which caters to the needs of educationally disadvantaged learners through the distance mode.
- Encouragement to professional development of staff

#### Recommendations

The Peer Team recommends the following for further improvement of the institution

- Steps may be taken to reduce the number of contributory teachers by appointing the teachers on contract basis
- Efforts may be made to encourage faculty members to take up individual and interdisciplinary research projects in collaboration with outside organizations.
- Efforts may be made to explore the possibility of introducing few more PG courses in disciplines depending upon the demand and feasibility.
- A separate audio-video room may be created with adequate facilities including
  LCD projector for power-point presentation.
- The college may make efforts to sign MoU's with leading national/international institutions to promote research activities and academic interactions.
- The library may be further strengthened by procuring latest editions of text books and reference books and by subscribing to additional scientific and popular journals
- Inter library loan facility may be provided.
- Book-bank facility may be made available to the needy students at the earliest.
- Library computersation may be expeditiously completed.
- Office administration may be computerised on a priority basis.
- NCC units may be started for boys and girls.
- The employment cell may be strengthened to provide for coaching classes for the students appearing for competitive examination.
- As per the direction of appropriate authorities, committee may be constituted for the prevention of sexual harassment in the college.
- Canteen facility may be provided on priority basis.

Hostel facility for girls may be adequately provided.

The Peer Team thanks the Principal, faculty members and non teaching staffs for extending full cooperation to the Team during its visit to the institution. The Team is also grateful to the NAAC for the opportunity given to visit DBSC, Gondia.

Names and Signatures of the members of the Peer Team

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Dr.K.D. Vasava (Chairman)

Dr. Aroon K. Heblekar (Member)

Dr. H.M. Rajashekara (Member-convener)

Name and Signature of the Head of the Institution.

I agree with the Report

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