TERI SCHOOL OF ADVANCED STUDIES
DARBARI SETH BLOCK, INDIA HABITAT CENTRE, NEW DELHI

MINUTES OF THE FIRST MEETING OF THE PLANNING & MONITORING BOARD HELD ON 12th MARCH 2001 & 19th MARCH 2001 AT 1100 HOURS IN THE MEETING ROOM

The meeting held on 12th March 2001 was adjourned since all the items on the Agenda could not be discussed. The adjourned meeting was subsequently held on 19th March, 2001 at 1100 hours.

PRESENT:

The following were present:

Dr T P Singh (Chairman)
Prof T N Khoshoo   (only on 12th March, 2001)
Prof Subhash Chander
Lt Col R P Singh   (Secretary)

Before taking up the Agenda, the Chairman welcomed the members.

ITEM NO. 1   **To ascertain the views of the Planning & Monitoring Board on the Concept Paper of TERI-SAS**

The Concept Paper was discussed at length. It was decided to add Annexure 1.2 outlining the composition and powers / responsibilities of the various committees referred to in Annexure 1.1 before it is sent for the approval of the Board of Management.

ITEM NO.2   **To consider the UGC recommendations regarding the Infrastructure facilities, Academic Units & Corpus Fund**

The Board discussed the stipulations by the UGC regarding the infrastructure facilities, academic units & Corpus Fund and made the following recommendations:

Buildings

The minimum requirement suggested by the revised guidelines issued by the UGC is 4000 sq. mts of academic and administrative buildings in addition to teachers' residences and a faculty guest house.

With respect to space for academic and administrative purposes, the Planning & Monitoring Board recommended setting up of a committee comprising of Director-TERISAS, Chief, Administrative Services-TERI and Registrar TERI-SAS to suggest ways and means of meeting the above stipulation. The Committee was requested to submit their report by 30th April, 2001.

With regard to faculty housing, the Planning & Monitoring Board suggested that till such time the School's own accommodation can be provided the following HRA rule be followed with respect to accommodation for faculty and administrative staff i.e. HRA be granted @ 45% of basic pay or least of the following in case of leased accommodation:

a) 85% of actual rent paid
b) 85% of Rs 8000.00 i.e. Rs 6800.00
c) 85% of 80% of basic salary

Academic Units

The following Departments are likely to emerge within the School:

a) Department of Biotechnology
b) Department of Natural Resources
c) Department of Energy & Environment
d) Department of Regulatory Studies
e) Department of Public Policy

The Planning and Monitoring Board recommended creation of fifteen Faculty positions to ensure the emergence of these departments.

The Board further recommended that in the meantime, the Ph.D programmes to be conducted by the School be initiated by recognizing appropriate Divisions of TERI as Centres of Research where such students can undertake and pursue academic research. For the purpose of recognizing Centres of Research, the Board suggested setting up of the following Committee for the consideration of the Academic Council and the Board of Management:

a) Two out of the five nominated members of the Academic Council Vide clause 8 (a) (vii) of the Rules and Regulations to be nominated by the Director TERI School of Advanced Studies.
b) Two professors, preferably from Delhi higher education institutions who are specialists in the area of work of the centre to be nominated by the Director TERI School of Advanced Studies.
c) Deans of the concerned Divisions of TERI
d) Director of TERI School of Advanced Studies.

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Corpus

As per the revised guidelines issued by the UGC, the School should have a minimum corpus of Rs. three crores. In pursuance of the revised guidelines, the Planning & Monitoring Board appreciated the need to raise the Corpus fund of at least Rs. Three crores by March 2004. The board recommended constituting a committee consisting of Director TERI-SAS as Convenor along with four to five members to devise ways and means to raise this Corpus. The Chairman of the committee may be nominated by the President.

ITEM NO.3 **To consider signing of Memorandum of Understanding between TERI School of Advanced Studies (TERI-SAS) & Tata Energy Research Institute (TERI)**

The Planning and Monitoring Board approved the draft MoU to be signed between TERI SAS and TERI and recommended that the same be put up for the consideration of the Board of Management after obtaining the advice of the Academic Council.

The meeting ended with a vote of thanks to the Chair.
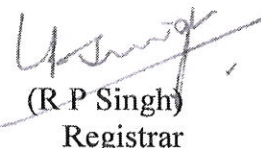
(R P Singh)
Registrar
Secretary, Planning & Monitoring Board

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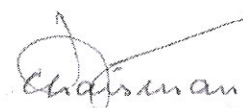
No.:TSAS/CONF/PMB/MINS/1/2001   Dated : 19:03:2001

Copy forward to all members of the Planning & Monitoring Board for favour of their comments. They are requested to kindly forward their comments, if any, by 23:03:2001. If no comments are received by that date, it will be presumed that they have no comments to offer and approve of the minutes as recorded.

(R P Singh)
Registrar
Secretary, Planning & Monitoring Board

No comments were received. kindly confirm the Minutes.

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Chairman
Planning & Monitoring Board
Dt: 29 May 2001

CONCEPT PAPER -TERI-SAS

The Central Government vide its notification no.F.9-19/95-U-3 dated 5th October, 1999 has declared TERI-School of Advanced Studies (TERI-SAS) as a Deemed-to-be-University under the provisions of Section 3 of the University Grants Commission (UGC) Act of 1956 on the recommendations of the UGC. For this purpose, the UGC has approved the prescribed Rules and Regulations of the TERI-SAS which were communicated to the School vide letter no.F.9-19/95-U.3 dated 7th February 2000. The Deemed-to-be-University status of the TERI-SAS grants the school the rights to confer degrees under the provisions of Section 22 of the UGC Act of 1956. This concept paper analyses the objectives of TERI-SAS, as approved by the Government, and attempts to develop an organisational structure of the School.

1.0   Objectives

1.   To provide for institution and training in energy studies, biosciences, environmental sciences, public policy and other such branches of learning as it may deem fit.
2.   To provide for research and for the advancement of and dissemination of knowledge.
3.   To do all such other acts and things as may be necessary or desirable to further the objects of the School. These may include, inter alia,

   (i) Establishment of and participation in collaborative activities with other educational institutions in and outside the country.
   (ii) To sponsor and organize teaching and training programmes, conferences and seminars on subjects of theoretical or practical relevance to the course of study; and
   (iii) To establish, acquire and maintain facilities such as offices, residential accommodation for staff, hostel for students, etc.

1.1   Objective 1

Objective 1 does not specify whether the institution be set up for imparting instruction to a formal degree/diploma or not. It is, therefore, implied that the school may run degree/diploma as well as non-degree/diploma programmes e.g short term courses, summer schools etc. The school being a school of advanced studies, all programmes in the school must necessarily be at the post-graduate level.

A provision has been made in this objective to add other branches of learning and suitable powers have been given vide clause 5(a)xxxiii of the rules to the Board of Management to establish, on the advice of academic council, divisions, departments for academic work and functions of the school. The academic council vide clause 8(b) xiii is also authorised to make periodical review of the activities of the departments/centres and to take appropriate action. These provisions point to the need of setting up of a periodic review mechanism.

In light of the above analysis, objective 1 resolves into the following components:

    1.1.1 to offer instructions in energy studies, biosciences, environmental sciences and public policy and other branches of learning at the post graduate level;

    1.1.2 To offer degree/diploma as well as non-degree diploma programmes at post graduate level;

    1.1.3 To make periodic evaluation of its Courses and programmes;

    1.1.4 To review, develop and update its curriculum so that the instruction remains at the cutting edge of knowledge/ technology.

1.2   Objective 2

Objective 2 asks for the provision of facilities to carry out research and for the advancement and dissemination of knowledge. These facilities could be degree oriented e.g M.Tech., M.Phil., Ph.D or delinked from a degree/ diploma.

Advancement and dissemination of knowledge have been clubbed in this objective with a view to highlight the necessity of dissemination of the advancements.

In light of the above comments, we can split the objective 2 into the following :

    1.2.1 to provide facilities for postgraduate study and research leading to postgraduate degrees like Ph.D, M.Tech., M.Phil., Post Graduate Diplomas, etc.

    1.2.2 to provide facilities to disseminate the advancements.

1.3   Objective 3

This objective lists some of the actions which are necessary or desirable to achieve the above mentioned objectives. It has three components :

1.3.1   Objective 3 (i)

This component chooses collaboration with other educational institutions as a mechanism to further the objects of the school.

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TERI-SAS has been conceived by the researchers and professionals of TERI. The areas specified in the objectives for the TERI-SAS are the same in which TERI's expertise is recognised internationally. TERI has built world class infrastructure for carrying out research, development, design and demonstration work in these areas. The rules and regulations of the school vide clause 28 also place the responsibility of meeting the costs, charges, expenses, shortfall/ deficit on TERI. Therefore it is desirable that special links be created between TERI and TERI-SAS in order to take advantage of the knowledge of TERI's professionals, infrastructure and experience in evolving, running and updating the courses in the School. It is also desirable that we include DST recognised research and development establishments in addition to other educational institutions for establishing collaborative links.

Objective one lists the areas of work of the school as energy studies, biosciences, environmental sciences and public policy. These areas have been researched and developed in TERI to actively promote technologies, policies, and institutions for efficient and sustainable use of natural resources. The academic work in some of these areas will require field studies involving collection, analysis and interpretation of data which is usually available either with government departments or with NGOs. Therefore, collaborative links with Government departments and NGOs will be necessary to achieve the objectives of the school. In view of the above analysis Objective 3(i) can be split into the following components

1.3.1.1   to foster special links with TERI to meet the objectives of the TERI-SAS.

1.3.1.2.   to develop collaborative links with other educational institutions and R&D establishments, Government departments and NGOs in the country.

1.3.1.3   to develop collaborative links with other educational institutions and R&D establishments and NGOs outside the country.

1.3.2   Objective 3 (ii)

This component defines the mechanism of dissemination of knowledge which can be further split into following sub components

1.3.2.1   to offer degree/diploma as well as non-degree diploma programmes at post graduate level;(same as 1.1.2)

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1.3.2.2   to organize short term programmes relevant to the area of studies in the school.

1.3.2.3   to sponsor and organize conferences and seminars of theoretical and practical interest.

1.3.3   Objective (iii)

This objective highlights the need to provide office as well as residential accommodation for staff and, hostel for the students as a necessary prerequisite to achieve the objectives of the school. The provision of residential accommodation both for the students and the faculty is incomplete without the necessary facilities for extracurricular activities which need to be provided for well rounded education of the students. This objective can therefore, be split into following executable actions:

1.3.3.1   to provide offices for the faculty and classrooms for teaching.

1.3.3.2   to provide computer room with internet facilities.

1.3.3.3   to provide residential accommodation for the students.

1.3.3.4   to provide residential accommodation for the faculty.

1.3.3.5   to provide facilities for extracurricular activities.

2.0   Evolving Appropriate Organisational Structures

2.1   Summary of the executable actions

In the last section the objectives of the school have been analysed in terms of executable actions. These are:

1.1.1   to offer instructions in energy studies, biosciences, environmental sciences and public policy and other branches of learning at the post graduate level;

1.1.2   to offer degree/diploma as well as non-degree diploma programmes at post graduate level;

1.1.3   to make periodic evaluation of its Courses and programmes;

1.1.4   to review, develop and update its curriculum so that the instruction remains at the cutting edge of knowledge/ Technology.

1.2.1   to provide facilities for postgraduate study and research leading to postgraduate degrees like Ph.D ,M.Tech., M.Phil., Diploma S.A.S. etc.

1.2.2   to provide facilities to disseminate the advancements.

1.3.1.1 to foster special links with TERI to meet the objectives of the TERI-SAS.

1.3.2.1 to develop collaborative links with other educational institutions and R&D establishments , Government departments and NGO's within the country

    1.3.2.1.1 to develop collaborative links with other educational institutions and R&D establishments and NGO's outside the country.

1.3.2.1 to offer degree/diploma as well as non-degree diploma programmes at post graduate level;(same as 1.1.2)

1.3.2.2 to organize short term programmes relevant to the area of studies in the school.

1.3.2.3 to sponsor and organize conferences and seminars of theoretical and practical interest.

1.3.3.1 to provide offices for the faculty and classrooms for teaching.

1.3.3.2 to provide computer room with internet facilities.

1.3.3.3 to provide residential accommodation for the students.

1.3.3.4 to provide residential accommodation for the faculty.

1.3.3.5 to provide facilities for extracurricular activities.

The above actions relate to:
1. Teaching and Academic Research
2. Collaborative links with TERI
3. Collaborative links with other organisations
4. Space for offices, classrooms, residential accommodation for faculty and students and extracurricular activities

2.2 Evolution of Organisational structure

The concept paper will focus on the first and second points mentioned above, to evolve an organisational structure that will facilitate the achievement of the objectives of the TERI-SAS.

2.2.1 Teaching and Research

All actions relating to offering instruction at postgraduate level, revision of curriculum and setting up infrastructure for research, establishing linkages with other organizations is a traditional role of a

university and is handled by departments. The following activities can be ascribed to this stream of action:

(a) Teaching both degree and non-degree courses at postgraduate level in Energy, Environment, Bio-sciences and Public Policy and other branches of learning.(1.1.1, 1.1.2, 1.3.2.1, 1.3.2.2)

(b) Review and updating of programmes/ courses their curricula and laboratory facilities so that the instruction remains at the cutting edge of technology.(1.1.3,1.1.4)

(c) Establish collaborative links with other institutions in and outside the country for placement of graduates, faculty development and for promoting R&D activities in general.(1.3.1.1 to 1.3.1.3)

In this stream of action the work is related to teaching in its entirety, from short term courses to Ph.D. research and to curriculum development. Clearly, continued contact with students is the central theme of all such activity, which implies that the teaching faculty involved must be available to the students on the campus or through the School's website on the internet.

2.2.2 Special link with TERI

The development of special link with TERI which is involved in technology development and industrial R&D is also one of the executable actions. TERI has contact with corporate world, industry, national and international funding agencies and takes up projects for the development of needed technological know-how and backup. This clearly requires frequent visits to industry/organizations, quick response time and well planned activity that is compatible with industrial requirements.

Professionals in TERI are also Co-supervising Ph.D, M.Phil and M.Sc. projects of students registered in other universities. The results of their own work and that of their students are published in refereed journals. The school should take advantage of the expertise and scholarship of the TERI professionals by recognizing the divisions in TERI as centers of research for carrying out project work. The Professionals in the center can be offered joint appointments at the professorial level provided they have significant achievements in academic research and teaching and in technology / policy development (Selection procedure for making such appointments as per rules and

regulations of SAS) and adjunct faculty positions at other levels. The professionals who hold joint appointments can spend up to 40% of their time in guiding projects of Ph.D./Master's students, teaching specialised courses and other activities in the school. TERI professionals would charge the time spent on SAS work against a TERI project code created for that purpose.

The Professors in the centres can hold administrative positions in the school and shall enjoy all the privileges under the rules and regulations of TERI-SAS.A similar provision be made in the TERI-SAS rules so that staff appointed in the school can be given joint appointment to work on sponsored Research and other projects of TERI.

2.2.3 Conclusion

It can be concluded that TERI-SAS needs to support an appropriate number of departments. These departments will have full time faculty, adjunct faculty and professors holding joint appointments between TERI and TERI-SAS. The divisions in TERI may be recognised as centres of research for carrying out postgraduate student projects. The research work of these students will need to be monitored by research committees within the School. A suitable structure for managing common laboratories and facilities will need to be evolved so that students work gets top priority.

3.0 Organisational Structure

The ideas of organisational structure, which have been developed in the previous section, can now be firmed up taking into account the special relationship the school enjoys with TERI. The major components in the school shall be departments and recognised centres of research in TERI. The staff working in the centres of research will be eligible for joint appointment in the school at the professor's level and as adjunct faculty at other levels.

3.1 Departments
3.1.1 Creation
1. When teaching is required to be initiated in energy, environment, bio-sciences and public policy and other areas of learning at the post graduate level.
2. sustained funding is assured.

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3.1.2 Main functions

1. Teaching at postgraduate level
2. Academic. research including guiding of Ph.D. and M.Tech./M.Phil. students.
3. Curriculum and laboratory development.
4. Sponsored R&D and consultancy.

3.1.3 Winding up

When the need for teaching in the discipline ceases.

3.1.4 Composition

1. Faculty positions, Full time and part time.
2. Administrative staff: technical staff including adjunct faculty engaged in supervising Doctoral Projects.

3.1.5 Infrastructure

Space for class rooms and laboratories: faculty rooms: secretarial facilities and stores. A separate budget under the control of the Head.

3.1.6 Activities

1. **Primary activities**: Teaching and academic research: Major faculty time spent on teaching, academic research, curriculum development. Research mainly open ended emphasis on high quality research publications, generation of instructional resource maTERIal and development of courses incorporating latest technological developments. Need to be in Delhi during the academic session.

2. **Secondary Activities**: Sponsored Research and consultancy. Maximum time 40%.

3.1.7 Administration

Head (From amongst Joint appointees from the centres and the Faculty in the department),Master's Programme Coordinator

3.1.8 Committee Structure

1. Board of Studies (as per clause 13 of TERI SAS rules)
2. S.R.C.
3. An advisory committee, with participation from industry and appropriate faculty from other school departments and centres of research for monitoring activities and for long term planning

and providing inputs to the School's Planning and Monitoring Board

3.1.9 Miscellaneous

1. Adjunct faculty from outside.
2. Curriculum Monitoring and Development cell with user/industry participation.
3. Faculty evaluation according to the stated functions of the department.
4. Each Ph.D. student to have an advisory committee nominated by his supervisor(s) and drawn from the parent department and other relevant centres. The committee will regularly monitor the progress of the student and appropriately advise the DRC.

3.2 Faculties

3.2.1 Creation

When Ph D programmes as well as Master's programmes by research are required to be initiated in recognised Centres of research.

3.2.2 Main Functions

Academic Research including monitoring the work of Ph.D. Student Research Committees

3.2.3 Winding up

When all the areas of research covered under the Faculty are transferred to the department set up for the purpose.

3.2.4 Composition

1. Faculty with Joint appointments between TERI and TERI-SAS, including adjunct faculty engaged in supervising Doctoral Research.
2. Administrative staff

3.2.5 Infrastructure Space for Deans and Administrative Staff

A separate budget under the control of Dean of Faculty

3.2.6 Activities

Management of Academic Research in recognised Centers of Research

3.2.7 Administration

Deans (from amongst the joint appointees from the Centers)

3.2.8 Committee Structure

1. Board of Studies (as per Clause 13 of TERI SAS rules)
2. Student Research Committees

3.3 Recognised Centres of Research

3.3.1 1. Eligibility for Recognition

Existing Divisions in TERI (manned by at least 2/3 professionals having Doctorate degrees) carrying out R&D projects sponsored by industry and S&T funding agencies.

2. Authority for recognition

Board of Management on the recommendation of expert committee appointed by the Academic council.

3.3.2 Academic Functions of the Centre of Research

1. Participation in M.Tech. and research programmes : running specialised pre Ph.D. courses: and guiding Ph.D. scholars / Master's students registered in the School on developmental topics.
2. Continuing education programmes to disseminate modern technical know-how.

3.3.3 Composition

Same as in faculty

3.3.4 Activities

1. **Primary activities** : Sponsored R&D and technology including technology transfer. Research mainly goal oriented and supported by group activity and extensive interaction, within and outside TERI.
2. Secondary Activities : teaching, academic research: Participation I In the teaching programmes of the school and guiding of Ph.D students. Total time spent on secondary activities not to exceed 40%.

3.3.5 Administration

Same as in faculty

3.3.6 Committee Structure

Same as in faculty

3.3.7 Miscellaneous

1. Each Ph.D. student to have an advisory committee (SRC) nominated by his supervisor(S) and drawn from departments/recognised centres of research.
2. Guiding of Ph.D. research is not a primary activity envisaged for the recognised centres of research. It is recognised that such activity is essential for professional development of centres faculty. The maximum number of students therefore needs to be limited.

3.4 M.Tech/ M.Phil Programmes

All master's programmes which require the use of laboratories of TERI need to be run jointly by departments, and the Faculty with the assistance of recognised Centers of Research.

3.4.1 Criteria for creating a Master's Programme

1. To Propagate and Promote the findings of TERI
2. To meet Industrial manpower requirements in specific fields identified on the basis of in house survey or on the basis of forecast by industry Federations.
3. Adequate funding is available to run the programme for around 3-5 years.

3.4.2 Master's Programmes

They need to be managed and shall require:

(a) **Infrastructure:**

1. Laboratories
2. Separate budget under the control of the coordinator to be allocated to the common facilities/ laboratories for running or augumenting the laboratories needed by the Master's programme.
3. Suitable space and secretarial staff for Coordinator, along with designated class room space for the programme.

(b) **Activities**

Teaching at Master's level and supervision of projects

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(c) **Administration**

Programme Coordinator, appointed on rotation basis from participating faculties / departments of TERI-SAS / recognised Centers of Research, having full executive powers including financial powers.

(d) **Committee structure**

1.   A Programme Execution Committee (PEC) with Coordinator as Chairman and participating faculty as members. This committee will be responsible for admissions, running of courses, moderation of grades and all day to day academic matters.

2.   Programme Advisory Committee (PAC) consisting of coordinator and Heads of respective units in TERI and TERI SAS. The committee will be responsible for ensuring infrastructural inputs to the programme and also for monitoring the status of the programme. A yearly review may be conducted to provide appropriate feedback to the PEC and to the academic council for implementation.

3.5   Organisation of Common Facilities

The users of Common laboratories and facilities could be:
1.   TERI's professionals
2.   Ph.D students of TERI-SAS.
3.   Master's students of TERI-SAS

These Laboratories/facilities will need to be managed as common facilities.

Each Laboratory/ facility will be administered by an Incharge drawn from TERI or TERI-SAS and will be provided with adequate technical staff and budget for day to day operation and for up-gradation. The incharge will be under overall control of the Dean of the Division in TERI of which this facility is part of. The common facilities will have an advisory committee with adequate representation from TERI and TERI-SAS User divisions/departments

The committee will be responsible for:
1.   Defining operating norms and schedules.
2.   Planning for up-gradation and modernisation of the facility/Laboratory to keep it responsive to the need of users.

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3.6 The organisational structure, evolved in the above paras along with the Policy making bodies and executive authorities, as provided for in the rules and regulations of TERI-SAS is enclosed as Annexure 1.1.

Dean Sponsored Research and Development and Executive Committee of Academic Council, consisting of Heads, Deans, and Registrar as the Secretary, is also included at the appropriate place in the organisational chart.