NIAS NEWS



Vol 10 No 2 April 2001



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APRIL 2001





Editors' Note

As we move deeper into the tenth year of publication of NIAS NEWS, we would like to reiterate our earnest attempts at providing you glimpses of the activities being carried out at the National Institute of Advanced Studies. We do hope that you enjoy reading it as much as we enjoy producing the newsletter. We would definitely like to make this attempt more interactive and so, please do write in to let us know if you have any suggestions and comments regarding its contents or format.

Anindya Sinha, Hamsa Kalyani and **A Devaraju**, Editors, April 2001



From the Director's Desk



As readers of NIAS News would know, Prof M N Srinivas, who had held the J R D Tata Visiting Chair at this Institute from the year 1991 when he joined us, passed away on November 30, 1999. His presence at the Institute was an indication of our commitment to the value of multidisciplinary research - combining scholarship in the natural and social sciences - a commitment that has been part of the vision that led to the founding of the Institute by the late J R D Tata. Prof Srinivas believed fervently in this vision. His world view encompassed all the commentaries that man has made (and continues to make) on his surroundings, ranging from religion at one end to technology at the other; indeed he made us realise that the two of them are not the ends of a spectrum. As a member of the faculty of the Institute and as a colleague, Prof Srinivas brought to us not only his great scholarship in sociology and social anthropology but equally great willingness to consider - warmly, enthusiastically - a wide variety of issues with persons outside his own profession. The fact that he was totally free of the deep cultural pessimism that is characteristic of large sections of the Indian intellectual community helped create on our campus a unique intellectual atmosphere that we hope enables us to examine, with scholarship and integrity, the complex issues that face Indian and global societies.

It was characteristic of Prof Srinivas during his years here that, while he was busy compiling a collection of essays titled *Indian Society through Personal Writings*, and editing a volume on *Caste*, its 20th *Century Avatar*, he also spent a great deal of time working with a group of scientists, technologists, businessmen and management experts to draw up what we called the *Bangalore Declaration*, made at a major information technology event that NIAS helped to organize in November 1998. Just before he passed away he was involved in another seminar organised jointly with Prof Kenneth Keniston of MIT (and Sir Ashutosh Mukherjee Visiting Professor at NIAS) on *Equity and Diversity in Information Technology*; and he had begun to work for an international symposium on *Religion and Society*.

As a person that all of us valued as much for the depth and breadth of his scholarship as for his human qualities, I and my colleagues at NIAS felt that it was very important that his values must be recalled in a series of lectures, to be given each year in his memory.

The first lecture in this series was given on January 9 this year by another most distinguished social anthropologist, Prof Triloki Nath Madan. Prof Madan, who retired recently as Director of the Institute of Economic Growth in Delhi, but continues as an Honorary Life Professor there. He has authored or edited over a dozen books; the most recent of these, Modern Myths and Locked Minds: Secularism and Fundamentalism in India, won the H.R.Chaturvedi award of the Centre for the Study of Developing Societies, Delhi. Prof Madan was editor of Contributions to Indian Sociology for 25 years, and currently edits the Oxford in India Studies in Sociology and Social Anthropology. He has been widely honoured for his scholarship: he is an Honorary Fellow of the Royal Anthropological Institute of Great Britain, and has been conferred an Honorary Doctorate by the University of Paris (Nanterre). He has taught at Lucknow,

Karnataka and Delhi Universities in India, and at a number of universities abroad including Harvard.



Prof Madan has lectured at our Institute before, and it was a pleasure to welcome him again when he came to speak in honour of his friend Prof Srinivas.

Prof Madan's theme, Religion in the modern world, was also one that was dear to Prof Srinivas. We are most grateful to Prof Madan for taking time off to come and visit us at Bangalore and to give the First M N Srinivas Memorial Lecture.

A summary of his lecture appears elsewhere in this issue, and the complete text will shortly be available from NIAS.

On March 12, we had a very distinguished visitor, Dr Karan Singh, M.P., who delivered a lecture on the *Interfaith movement*. Dr Karan Singh's forceful and eloquent arguments for the movement struck a very responsive chord among the audience that filled the Auditorium to hear him speak. The text of his lecture will also be available from NIAS before long.

I have on previous occasions spoken about the Forum for Entrepreneurship Development that NIAS and other institutions in Bangalore have been running during the last two years. Its activities are continuing vigorously. As part of its increasingly visible programmes the Forum ran an Idea Lab on March 24. The purpose of the Lab was to connect FED members (now numbering 9) with ideas of possible projects with venture capitalists and consultants, so that avenues for implementing attractive ideas may be opened up. Thirty people were present on the occasion; and there were some very

interesting presentations indeed from some very young entrepreneurs. It is hoped that we will be able to promote the best of these ideas so that at least some of them will eventually make it to the market place.

In another programme organized by the Forum, Dr Akshai Runchal, President of Analytic & Computational Research Inc., USA, spoke on *Institutes for Software Development* on January 23.

A third event in the Forum's programmes was a discussion on problems faced by small- and medium-scale entrepreneurs. The meeting was the consequence of a widely shared concern about the problems facing small and high technology entrepreneurs, in particular (but not limited to) those involved in hardware manufacture. A total of nine entrepreneurs attended the meeting; there were other interested participants. The discussions were both animated and illuminating. There was, on the one hand, a widespread feeling that conditions in the country were not conducive to the growth of such enterprises: government policies, in terms of excise, sales tax and import duties, coupled with widespread corruption, were seen as major inhibitors of growth. But there was also a feeling, very eloquently expressed especially in the second half of the meeting, that even in the present conditions it is actually possible to make such enterprises excel, and what was needed were some visible examples of success. The meeting concluded with the decision to organise a more comprehensive meeting at a later date with entrepreneurs from across the country.

* * *

On Saturday, January 13, we had a remarkable literary event. Selections from *Small Remedies*, a novel written by Ms Shashi Deshpande, were presented by the



Little Theatre group of Hyderabad, led by Mr Shankar Melkote. The unusual feature of the event was that readings from the novel were accompanied by Hindustani music, sometimes in the background at other times in the foreground, reflecting the course of the life of the classical Hindustani singer who is the heroine of the novel. The evening was an unusual combination of English prose and Indian music; it was an enchanting – and touching – experience to 'hear' the ups and downs of Indorekar's life, so vividly presented by Mr Melkote and his team of readers and singers.

R Narasimha



Research Programmes

The principal areas of research that faculty members of the Institute are currently involved in include consciousness studies, conservation biology, energy policy and renewable energy, environmental toxicology, epigraphy, fluid dynamics and atmospheric sciences, gender studies, history and philosophy of science, international and strategic studies, mathematical modelling in non-traditional areas, primate behaviour and cognition, science and technology policy, sociology and social anthropology, and theory of numbers.

More specifically, the Science and Technology Policy Studies Unit have recently initiated a project entitled "Assessment of the role of carbon-neutral technologies in India's power sector" as a part of Louis Berger, Inc-managed USAID project on greenhouse gas pollution

prevention. In this connection, Dilip Ahuja was elected Lead Author at the project-initiating meeting at IGIDR, Mumbai, on January 22.

It is clear that provision of energy services is crucial for India's economic development. It is also clear that the diffusion of decentralised and distributed energy technologies, which tend to be largely carbon-neutral, has been slower than that suggested by their economic potential, especially in rural areas. This research will assess the status of the more important of the various carbon-neutral technologies (CNTs), and attempt to quantify the role they can play in India's power sector in the near (10 years) and the medium term (20 years). By analysing reasons for success and failure of past efforts at the promotion of CNTs, the research will identify the barriers to their widespread diffusion and recommend ways to overcome them. The outcome of this effort will be, therefore, an assessment of the status of the CNTs, shortand medium-term strategies for their promotion; recommendations on what research, policy and institutional changes that might be required, and a prioritised list of projects that could be undertaken.

The Epigraphy Unit has submitted the final report on the project entitled "Development of software technology for epigraphy texts", sponsored by the Indian Space Research Organisation, to the funding organisation.





NIAS PUBLICATIONS

Copies of the below-mentioned NIAS publication can be purchased from the Institute. Please contact the **Controller**, NIAS, for more details.

I. NIAS REPORTS

R1-01

Report on a Workshop on the Draft Indian Nuclear Doctrine

Arvind Kumar (ed.) International Affairs and Strategic Studies Unit

BOOKS

Ramesh, A and Ali, B 2001. 33 1/3 % reservation towards political empowerment. Books for Change, Bangalore.

PAPERS

Anasuya Devi, H K 2001. Image processing techniques for epigraphy texts. *Studies in Indian Epigraphy* (Bharatiya Purabhilekha Patrika). **XXVII**: 147-158

Kapur, R L 2001. Families caring for the mentally ill. *Health Action* **14**(4): 15-17

Sonpar, S and **Kapur**, **R L** 2001. Non-conventional indicators: Gender disparities under structural reforms. *Economic and Political Weekly* **36**(1): 66-78

Vasavi, A R 2000. Book review of "Savaging the civilized: Verrier Elwin, his tribals and India" by Ramachandra Guha. New Delhi: OUP, 1999. Contributions to Indian Sociology 34(3): 448-451

BOOK CHAPTERS

Kumar, A 2001. RMA and Air Force. In: Proceedings of *Aero India* 2001 – *International Seminar on Aerospace Technologies: Developments and Strategies,* held between February 8-9, 2001. Vol 2 (CD-ROM publication)

Sarukkai, S 2000. Symbols of truth: Objectivity and reality in science. In: *Science and Tradition* (ed. A K Raina et al.). Indian Institute of Advanced Studies, Shimla, pp. 26-38

ARTICLES

Devaraju, A 2001. Have friend, have all. *The Hindu* (Young World column), March 2.

Devaraju, A 2001. Thinker and versatile writer (on late Dr D V Gundappa, on the occasion of his birth anniversary on March 17). *The Hindu* (Friday Review Section), March 16.

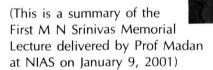
Madhusudan, M D 2001. Book review of "Nature's spokesman: M Krishnan and Indian wildlife, edited by Ramachandra Guha, Oxford University Press, New Delhi, 2000. Book Review XXV(1): 36-37





RELIGION IN THE MODERN WORLD

Triloki Nath Madan Institute of Economic Growth, New Delhi



widespread conviction among intellectuals in the West at the beginning of the 20th century was that religion was in the process of being driven out of collective social life and privatised. The world was being rid of mysteries, miracles and magic. Marx had recently proclaimed that the abolition of religion was necessary for the 'real happiness' of the people. There were others who were equally convinced that the idea of God was dead, but they were not sure that this was an unmixed blessing. If the affirmation of the idea implied that the secular world had no real significance, its denial meant that in the absence of a source of ultimate values, everything became meaningless. The world of science and rationality was grounded in instrumental values and such criteria of perfection as efficiency. Questions about the meaning of life and the significance of death were regarded as of no or only remote interest. Humanity seemed to be getting closer to mastering life technically, but whether it made sense to do so was not considered.

A middle position was held by some thinkers, who argued that although religion was destined to disappear, there was

something eternal about its social function, namely the maintenance of society through the formation of a moral consensus about its legitimacy. If religion was not going to be available any longer to do this, then secular education or, more broadly, secular humanism would surely fill the vacuum, and help to realise the Enlightenment vision of humanity in charge of itself. The persuasiveness of such ideas became stronger with the passage of time. Around the beginning of the second half of the century, many Christian theologians came forward with the novel thesis that the historical processes of secularisation could not but be the will of God.

Signs of weariness about the secularist world view began to emerge in the 1960s. Rethinking about alternative visions of life among intellectuals went hand in hand with unrest among the youth on university campuses. Movements collectively referred to as 'counter culture' made their appearance: they aimed at recovering the mystical and the spiritual elements of human experience. In his inaugural address (1961), John Kennedy, speaking for a new generation in America, proclaimed that 'the rights of man' came from not 'the generosity of the state' but 'the hand of God'. This was a reassertion of the religious or moral foundations of politics, and reminiscent of what Gandhi had affirmed throughout his public life. The notion that the separation of the State and the Church in the USA had been made possible by the emergence of a 'civil religion' rooted in the collective experience of the American people as a nation gained ground. Signs of a return of the sacred were, however, considered marginal to the mainstream of world history.

The 1970s were marked by significant developments in the so-called peripheries of the world. In Nicaragua, Catholic priests



formulated a 'theology of liberation', bringing together Christianity and Marxism for promoting the forces of economic and political emancipation. Eventually the combination of a socially active Church, a redefined Marxism and guerilla tactics became crucial in the making of the successful revolution that saw the end of a tyrannical police dictatorship in 1978. Similarly, in Poland, the Catholic Church first struggled for its survival under a communist regime. It then emerged as a supported of agricultural and industrial workers and a defender of universal human rights. It took on the role of being the 'keeper' of Polish culture and the nation. It lent support to the Workers Defence Committee (1976) that soon grew into the powerful Solidarity movement which ended yet another dictatorship.

In Iran, however, the return of organised religion as the foe of a westernised society and a 'secular' state was retrogressive. Here, Marxist intellectuals joined hands opportunistically with fundamentalist Shia clerics who finally spearheaded the 1978 revolution, eliminating their collaborators. Around the same time and throughout the 1980s, religious identities became assertive in India also. Hindu communalism (Hindutva), Sikh fundamentalism (Bhindranwale), and Muslim resistance (Shah Bano, minority rights) vied with each other for public prominence. The portentous aftermath of these confrontations is still very much with us.

Its worldwide ugly manifestations are not all there is to religion. The collapse of the east European communist empire and the softening of Chinese communism have resulted in an enormous resurgence of religious faith among millions of people. A similar resurgence has occurred in Japan, and desecularisation is reported from the

Scandinavian countries. Countries culturally as disparate as India and the USA remain largely religious. In short, contrary to what was believed a hundred years ago would happen has not happened: religion has not disappeared from the world.

Ironically, public visibility of religion has been aided in various ways by the facilities of the modern world. More than ever before, religious pilgrimages have become the order of the day. Improved economic conditions, easier and faster travel, combination of religious devotion and secular tourism, media attention, etc have transformed religious activities into public performances. While multitudes move, millions watch. For the religious minded this may be vicarious participation, for others it is entertainment. Images of the mid-night Christmas mass in St Peter's Square in Rome, or of Haj pilgrims gathered in Mecca, persist in the minds of people. Currently, the Kumbha mela occupies the front pages of newspapers and preempts prime time on the electronic media. Such attention focuses on the bizarre and the sensational. Be that as it may, religion survives to day - whether as personal faith, defender of human rights, fanaticism, or sheer spectacle.

VILLAGE, CASTE AND EDUCATION

B K Anitha Gender Studies Unit

(This essay captures the spirit of the book of the same name authored by B K Anitha and published by Rawat Publications, New Delhi, in 2000)

Even at the turn of the millennium, India still houses the largest number of illiterates in the world. After Independence, there have been concerted efforts to give a thrust to the growth of the educational system in the country. However this growth has not addressed head on the issues of **equity** and **quality** of education, resulting in 32 million out-of-school children and inferior quality of education for many school-going children. The need to address these twin issues is vital in providing equal opportunities for learning along with a fair distribution of resources, both human and material.



Unfortunately, India's educational policies have resulted in the creation of two streams in education, one for the elite and the other for the masses. Efforts in improving the former has always been qualitative in nature, while in the case of the latter it is largely restricted to improving the access to these institutions. Thus, while more and more students join the mainstream of formal education, the gap between the elite schools and the public schools further widens. The presence of public schools is fast dwindling in the urban centres and is seen as a characteristic of rural society.

The school is a reflection of the society within which it is located. The rural schools characterised by the caste/class/ genderbased inequalities tend to reproduce the status quo by reinforcing the dominant ideology and social stratification. The book focuses on the factors responsible for this reproduction. The intention is to shift attention from the reasons associated with the family background of these students to more fundamental associated causes that lie within the context of school and community. In doing this, school is not studied as an isolated institution but one that is located within a community. Thus, the study has also tried to argue that the enhancing of infra-structural facilities by itself cannot ensure the quality of education in Indian schools, which overwhelmingly is teacher oriented. The factors are teacher

orientation, community school interaction, and the average length of the school day in terms of the active instruction time and the quality of the educational transactions within these schools among others. In doing this, the intention is not to nullify the effect of the socio-economic status of the students but to illustrate that family-related variables are just one set of factors.

The school-related factors affecting quality are teacher orientation, school-community relationship, average length of the school day, attendance of students and educational transactions.

Teacher orientation

Teacher orientation is an important dimension of school quality since it has a direct bearing on the teacher-student interaction. It is examined at two levels, viz., the mind-set regarding the meaning of education for the rural population; and definition of educational objectives. Assessment of teacher orientation is based on the expressed and inferred opinion elicited/observed during the case study process adopted in the study.

Of a total of 35 sampled teachers, nearly equal number exhibit positive and negative attitudes towards the education of lower caste children. Most teachers with a positive attitude are concentrated in schools that have been able to develop a positive schoolcommunity relationship. It is difficult to infer if the attitude of the teacher influences the school-community relation-ship or vice versa. However, it is discernible that positive attitude of the teachers and healthy schoolcommunity relationship contribute to better school quality. A significant determinant of 'the mind-set of teachers regarding the meaning of education to the rural population' is the place of residence of teachers. Most teachers with positive attitude are those who have long years of association with the school.



School-community relationship

The school-community relationship has a major role to play in creating a demand for quality education in the rural context. Unlike stereotypical beliefs, the problem of primary education in India is essentially the inability of the clientele to demand quality education. Schools, and in particular the teachers, can play a positive role in fostering good ties with the community. For schools located in villages with a considerable number of households belonging to the scheduled castes and tribes, good ties plays a positive role. The teachers of the aforesaid schools belong to the upper castes and do not entertain parent teacher interaction. Parents who visit schools are not treated well by teachers. This discourages parents from visiting schools, which in turn negatively impacts school-community relationship. This relationship is positively correlated to quality of schooling despite the continuing limitations of rural schools including multigrade teaching.

The school-community relationship may be understood in terms of several parametres. The first is the perception of teachers and headmistress/master regarding their association with the community. The second aspect is the perception of the community about the functioning of the school. The third aspect is the practical operation of the school-betterment committee and lastly it is the extent to which the school draws on the community resources. In the case of single/two caste villages and diversified caste villages, the communities composed of the dominant castes, which are the clienteles of schools located within the village, create a demand

for quality education. The nature of this demand takes various forms including nurturing school-community ties as well as ensuring the commitment of teachers. The teachers of these schools invariably belong to the upper castes. The community informs teachers in subtle ways to either change their attitude if negative or to face a transfer. This is the pattern observed in the distribution of schools located in different caste based communities. This brings out very clearly that the communities with a relatively higher percentage of SC households are unable to create this demand. The reasons may be due to the historical disadvantage of these communities compounded with the fact that teachers who serve in schools located in SC concentrated village type belong to the upper castes. In most cases, the powerful communities in these villages believe that as formal education spreads among the lower castes, it will be increasingly difficult to keep them in the condition in which they are today.

Average length of the school day

The average length of the school day is a direct measurement of the actual time that a child spends in school. This is a crucial variable in determining the instructional time that is directly related to the learning of a child. Although the official length of a school day is five hours, the average length of the school day ranges from less than 40 minutes to 5 hours. By and large, the length of the school day in rural areas falls dismally short of the norms. The length of the school day is determined by several factors. The residence of the teacher as well as the demand that can be created by the clientele directly impact the active instruction time of the children.

Attendance of students



The average attendance of students in 4 cycles (June/July; August/ September; November/December; and January/ February) of observation in one year is calculated in percentages. All schools recorded an average of ten per cent fall in attendance during the second cycle due to the peak agricultural season, where children specially of the poorer households take part in the agricultural activities. The percentage fall is as high as seventeen per cent in villages that have a considerable number of scheduled castes households.

Educational transactions

Analysis of field observations revealed four distinctive categories of educational transactions. Each category is described based on the structural dimension of the learning episode, direction and supervisory nature of the class room activity, nature and extent of student participation and the purpose served in relation to the learning episode.

The four categories of educational transactions evolved based on direct observation are: Domesticating/ Shepherding, Grinding in Basics, Information Transmission and Functional Instruction. The total number of learning episodes observed have been classified into the above four categories. The distribution of the different categories in the sample villages reiterates that the schools located in villages with a considerable number of SC households show the preponderance of the lower categories of educational transactions namely domesticating and grinding basics. The emphasis of these categories of educational transactions is to promote the disciplining of students. The amount of time spent for discipline related

activities suggests that in actual school functioning hours, which is already less than the required norm of five hours, teachers reduce the learning time further by indulging in disciplining the pupils. The converse is true among schools located in single/two caste villages and the multi-caste villages, where a majority of the educational transactions were information transmission and functional instruction, both of relatively higher order of learning.

The achievement tests administered during the end of the academic year also corroborated the findings in terms of the qualitative aspects of school education.

POLICY IMPLICATIONS

The society and the formal educational system operate as two different worlds separated by a space of historically contingent power structures that demarcate the less privileged from the privileged. Hence, the individuals entering the formal educational system tend to get filtered by access to this space. Historically, entry to this space has been selective in nature, defined by a social structure that is determined by the caste system. The various affirmative measures undertaken by the government have legally eliminated all the discriminatory aspects associated with caste system. However, the educational system is still perpetuating its selection function right from the lowest levels. In urban areas, this exists predominantly in the form of schools with different curricula and medium catering to different sections of the society. Further, teachers who are the key actors in primary education do not share the constitutional value of providing equal educational opportunity to all. This is reflected in their interaction with students as well as the community. The impact of interaction on the this negative

underprivileged sections is the exclusion of children of these communities from formal education, ensuring the reproduction of the social structure. This, in a way, is a failure of the educational system, and particularly of the training programme of the teachers, that does not lay emphasis on values like equality and sensitivity to different cultures. Moreover, the reality is that the resources within the system are grossly insufficient and even those are not

equitably distributed. Moreover, the arrangement of school timings and the vacation are decided at the power centres that most often may not be appropriate for the local conditions. Attempts to change the school calendar as well as school timings in some of the District Primary Educational programme on

an experimental basis met with stiff resistance from the teachers' unions. This is not surprising given the fact that the teachers who serve in rural schools most often do not belong to the community that they serve. Hence, the education system

elaborate

accommodates the demands of the teaching community that is relatively powerful visà-vis the community. Finally, these teachers who are largely trained in colleges that are located in cities and towns are not equipped with skills in handling multi-grade situations. Such situations are a norm rather than an exception in the rural context.

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In the light of the above observations, it is imperative that there should be a structural change in the educational system. The management of compulsory primary education should be separated from the existing administrative structure and should be decentralised at a viable level, like the districts. The teachers' training programme should be designed to equip teachers to respond to cultural specificity of local



communities. The focus of the training has to be rural schools as the majority of the primary schools are located in rural areas. It may also be noted that most of the teachers who pass out of training colleges are likely to be absorbed in rural areas. In the coming years, demand for teachers will emanate from maintaining the existing school provisions and the large scale expansion needed in rural areas to cover the remaining 30-40 per cent of children not attending the school. This will be essential in realising the fundamental right to education provided in the Constitution.

All these years the teachers' training programme was based on rigidities of content and form. There should be a creative redefinition of the roles of teachers that lends itself to equip teachers to function in multiple contexts. Hence, a conscious attempt should be made in the training programme to orient the teachers towards values of the Constitution, and prepare them to positively respond to the community. In the process, the excessive attention paid to the supply factors of the educational system can be shifted to the demand that communities can create for quality education. Thus the state responsibility of universal primary education will be restricted to financial allocation and the administrative support required for running these primary schools. The nature of support, however will be in accordance to the demands of essentially the community and teachers, who will be in charge of the day-to-day functioning of the school at the local level. This approach will be along similar lines to successful non-governmental initiatives of organisations. The advantage of this approach is the potential it has regarding sustainability and the scale of operation in the long run.

An intensive, recurring in-service training programme should be taken up for the teachers working in rural schools specifically to sensitise them in responding to children who are first-generation learners. Such training should aim towards changing the attitudes of teachers and giving them skills in multi-grade teaching.



Micro planning at the block level, keeping each village as unit of analysis, should be built into the functioning of educational management. This will ensure locale specific arrangements for both formal and non-formal activities in primary education. A serious attempt will have to be made in building a symbiotic and enriching relationship between schools and communities. In the Indian context, the participation of the community in school activities and vice versa will have to take note of the fact that the community is not always homogenous. It remains a challenge for schools to nurture the cultural differences among communities, by making teachers caste-sensitive, which in itself is an enriching experience.

NEW DIRECTIONS IN RESEARCH

There is a need to develop alternative frameworks to understand the functioning of school not as an independent institution but as part of a larger community from which it draws students. These frameworks must be based on extensive, in-depth studies with an interdisciplinary approach. In this context, it may be required to understand that categories that define school quality differ significantly depending on the location of the schools. Unlike schools in developed countries, most schools in rural India like many developing countries are located at the lower end of the school quality continuum. Thus it is essential that one does not borrow categories that describe school quality in developed countries, but instead evolve categories of school quality that are operational in rural Indian contexts.

Research studies placed against such a framework will give us a better understanding of school quality and will lend themselves to specific policy directions. Large-scale survey of quality of education can be taken up by observations of schools based on the categories that emerge out of such in-depth studies. There is a need to focus research studies on priority areas like primary education, especially for a country like India, where teacher behaviour in the classroom most often is studied at the secondary levels, and tools used in such studies are adopted from different socio-cultural contexts. Studies at the primary school level suffer from lack of appropriate tools and categorisation of educational transactions.

DOCTORAL PROGRAMME IN NIAS

NIAS is a unique institution that conducts advanced research in multidisciplinary areas that bridge the gap between the natural sciences, technology and the social sciences. Complementing its research programmes, NIAS also offers courses in different areas of research, development and policy for different groups of professionals including teachers, bureaucrats, and executives.

One constraint that NIAS has functioned under so far has been the lack of a doctoral programme whereby young students are trained in the research areas that the Institute has traditionally been interested in. There is, however, an urgent need for such a programme for two principal reasons. First, the unique multidisciplinary academic culture that NIAS has so carefully

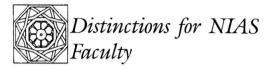
been building up over the past years has to be nurtured and not allowed to dissipate with the passage of time. This would require that young, talented, and committed students are identified and absorbed into the organisation — they would then serve as torchbearers into the future. Second, much of the research being conducted in the Institute, being of an interdisciplinary nature, requires cooperation between a number of specialists. Large groups such as these would definitely benefit from young researchers of different disciplines who can actively contribute to the progress of the

group in their respective areas of expertise.

It must also be noted that there has been, in recent times, increasing awareness and interest in issues relating to the interfaces between the natural sciences, technology and the social sciences among young Indian graduate students. Many of them, in fact, are becoming increasingly attracted to pursuing a research career in these interdisciplinary areas. Very opportunities, however, exist for such students, who have dared to think differently, to pursue a career of their choice within the country. NIAS has thus begun a doctoral programme in collaboration with the Manipal Academy of Higher Education (MAHE), Manipal, an innovative leader among institutions imparting higher education in the basic and applied sciences in the country. This programme specifically involves the awarding of doctoral degrees by MAHE to students interested to pursue independent research in the areas that NIAS specialises in. For more information, please contact Anindya Sinha (asinha@nias.iisc.ernet.in).

Anindya Sinha





Dilip Ahuja

Appointed one of the Directors, GEE-21 (Global Environment and Energy in the 21st Century), a non-profit NGO based in Honolulu, Hawaii, USA.

N Shantha Mohan

Appointed Board Member of the State Resource Centre, Mysore.

Nominated Member of the Review Committee on 'Institutional Aspects of Irrigation', Jala Samavardhane Yojana Sangha, Bangalore.

Anindya Sinha

Nominated Honorary Associate of the Nature Conservation Foundation, a non-profit NGO based in Mysore, dedicated to research in wildlife and conservation.



Important Events

Complementing its research programmes, NIAS organises a variety of seminars, workshops, and academic courses each year. Some of the important events that were organised during the period from January to March 2001 included:

FIFTEENTH NIAS COURSE FOR SENIOR EXECUTIVES

January 8-20

The fifteenth NIAS Course for Senior Executives had, as its theme, The New Economy. This was selected keeping in

view that in the last decade a new economy appears to have emerged, driven by knowledge-based industries, such as bioand information technologies and agribusiness. The economic value of certain forms of knowledge is becoming central to success of several types of industry, and the protection of intellectual property rights has become a major commercial, social and political concern. This course addressed a number of issues including the following questions: What is new in the New Economy? What are the major issues concerning it that we should now consider? What are the implications for the Old Economy? What are the implications of these changes for government, industry,

academia and technology development agencies? Apart from this, the course also touched upon cultural, sociological and

scientific issues of this country.

There were 18 participants representing both Government and private industries. The participants belonged to the several organisations including Ministry of External Affairs and Ministry of Communications of the Government of India, Tata Engineering and Locomotive Company Ltd, United Credit Securities Ltd, Department of Atomic Energy, Council of Scientific and Industrial Research, Department of Science and Technology, Indian Space Research Organisation, Defence Research and Development Laboratory, Indian Army and two IAS officers of the Government of Karnataka.

There were about 22 lectures and 3 panel discussions during the two weeks of the course. Some of the distinguished speakers of the course, apart from the NIAS faculty, were Mr Vivek Kulkarni, Secretary Information Technology, Government of Karnataka, Bangalore; Dr Narendra Pani, Senior Editor, Economic Times, Bangalore;



Dr G Mohan Gopal, Director, NLSIU, Bangalore: Dr Raja Ramanna, Member of Parliament (Rajya Sabha); Ms Mathura Chatrapathi, Asian Centre for Entrepreneurs Institute, Bangalore; Prof H Sharat Chandra, Professor, Department of Microbiology and Cell Biology, Indian Institute of Science, Bangalore; Dr D M Nanjundappa, Chairman, High Power Committee for Redressal of Regional Imbalances; Dr P C Nayak, Founder Director, Centre for Technology Development, Indian Institute of Science, Bangalore; Mr Vijay Angadi, Managing Director, ICF Ventures, Bangalore; Mr H Ravindranath Rao, General Manager, Syndicate Bank, Bangalore; Prof U R Rao, Member, Space Commission, Indian Space Research Organisation, Bangalore; Prof V K Nataraj, Director, Madras Institute of Development Studies: and Mr S Gurumurthy, Adviser, Express Publications, Chennai.

The course was inaugurated by Mr Jairam Ramesh, Deputy Chairman, State Planning Board, Government of Karnataka, Bangalore, who addressed the audience on Linkages of the New Economy with the Old. Dr V K Aatre, Scientific Adviser to Defence Minister, Secretary, Department of Defence Research and Development, and Director General, Defence Research and Development Organisation, Ministry of Defence, New Delhi, delivered the valedictory address.

During the two weeks' programme, in addition to lectures and panel discussions, the course was complimented by self-introduction sessions in which participants talked about their work and interests. They also worked on group projects and presented the same during the later part of the course. Finally, they visited Nrityagram—the Dance Village—and the Indian Space Research Organisation. The participants

were also taught yoga at an introductory level as a mandatory component of the course.



P K Shetty

DISCUSSION MEETING ON RENEWABLE ENERGY SYSTEMS

February 15

A discussion meeting on Promoting Renewable Energy Systems in Karnataka was organised at NIAS. The participants in the deliberations included Prof A Ramachandran (Chair), Prof H N Sharan, Prof H S Mukunda, Prof R Narasimha and Mr K P Pandey, Principal Secretary, Department of Energy, Government of Karnataka.

Dilip Ahuja

PROGRAMMES OF THE GENDER STUDIES UNIT

Project on Violence against Women

Poster Workshops. In connection with the Violence against Women advocacy project, two poster workshops were organised in the districts of Kodagu and Kolar on January 14 and 21, respectively. The themes for the workshops were 'Violence by the State' in Kodagu and 'Violence on Women due to Alcoholism' in Kolar. To get a better understanding of this complex issue the workshops were organised in the study villages. The participants included the tribal/ non-tribal men and women from the communities. The workshops were facilitated by the NIAS team. A total of 30 members participated in each of the workshops.

Strategising Workshops. Another important activity in relation to the project was the progress made by the GSU with the Police department of the state. Initially, a day's planning meeting was organised in NIAS with the Superintendents of Police of the project districts on January 5. The purpose was to evolve strategies to combat violence against women in the respective districts, particularly in the study villages. Following this, district level workshops were organised in all the districts during the month of February to facilitate the process of evolving specific strategies to combat the specific forms of violence in the individual districts. The participants comprised the District Superintendent of Police, Deputy Superintendents of Police, Circle Inspectors, Sub-inspectors and women Constables, A total of about 250 police officers actively participated in the workshops and it was encouraging to note their commitment to the cause.

Project on Decentralised Governance

In continuation with the longitudinal research-advocacy-action component of the project, the elections to the taluka and zilla panchayat levels were studied. The findings of these elections were shared at a one-day multi-party consultation held on January 17. State-level senior party members and party women's wing presidents of all the national parties in Karnataka were panellists in this consultation. The parties that deliberated in the consultation were Congress-I, JD (S), JD (U), BJP, CPI and CPM. The participants also comprised of elected panchayati raj representatives, district level party and women's wing members, researchers, social activists, our NGO partners, media persons, bureaucrats, and other NGO representatives, who deliberated on the issue. There were over a hundred participants.

The Director of NIAS, Prof R. Narasimha gave the welcome address and Dr N Shantha Mohan, Fellow of the Unit, made the introductory remarks. The keynote address was delivered by Mr T P Issar, former Chief Secretary of Karnataka. Ms Asha Ramesh, Research Associate, made a presentation on the findings of the taluka and zilla panchayat elections that were conducted in the three study districts, namely Koppal, Mysore and Udupi. This was followed by a panel presentation by women party presidents on the "Position of Women in Parties" followed by a panel on the response to the presentations by senior party functionaries. These sessions were chaired by Ms Madhura Chatrapathy and Prof Abdul Aziz, respectively.

There was a consensus for the reservation policy to be passed and the need to create a conducive environment for women's political participation. But it was also felt that for this to happen, systematic capacity-building efforts are essential to enhance the leadership abilities and administration skills of elected women. Enabling mechanisms, coupled with affirmative action by political parties, the state and civil society in partnership and cooperation, are all required to empower women to bring about the desired changes that would lead to engendering governance.

N Shantha Mohan

CONSCIOUSNESS DISCUSSION FORUM

The Philosophy of Science Unit, in an effort to increase its activities in consciousness studies and to draw upon other existing sources of knowledge and interest in this area, has initiated a Consciousness Discussion Forum, which had its second

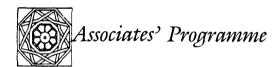


meeting on February 15. The theme chosen for discussion was "Consciousness in classical Yoga". Prof T N Anantharaman, Former Director of the Indian Institute of Technology, Varanasi, made the opening statements on the theme.

The Forum will meet once in two months. Following the exchange of ideas in the first two meetings, an e-group on Consciousness was formed. Those interested to join this discussion forum can either log on to www.egroups.com/groups/NIAS-forum-on-CONSCIOUSNESS/ and register themselves or subscribe to the group by sending an email to:

NIAS-forum-on-CONSCIOUSNESS-subscribe@egroups.com.

Please contact Sangeetha Menon (smenon@nias.iisc.ernet.in) for more details.



The Institute maintains a strong outreach with its Associates Programme, organised by **PK Shetty**. The Associates of the Institute include prominent personalities from widely different backgrounds in the media, arts, policy-making and academia. Associates are invited to a monthly evening lecture series and other important events, and constitute a strong base of ongoing outside support and interactions for the Institute.

The Associates' Programmes during the period from January to March 2001 included the following events:

January 9 The First M N Srinivas Memorial Lecture: Religion in the Modern World

ure:
Modern World

T N Madan Institute of Economic Growth New Delhi

January 13 Small remedies

Selections from the novel by Shashi Deshpande, read by the *The Little Theatre*, Hyderabad

The reading was accompanied by Hindustani classical music, which was also arranged by The Little Theatre

March 2 The Gujarat earthquake and after

V K Gaur Indian Institute of Astrophysics Bangalore



The members of the Institute meet every Wednesday morning (and rarely on othermornings too!) for informal academic discussions after a talk delivered by a member of the faculty. These Wednesday meetings, organised by Sangeetha Menon, also serve as a forum for invited guest speakers to deliver a lecture on a subject of their choice. The discussions then continue over the high tea that follow these talks!

The Wednesday Discussion Meetings during the period from January to March 2001 have included:

January 24 Numbers on the line, four fundamental operations and so on

K Ramachandra

February 7 Birbal calling Akbar: Some new ideas for sending secret messages

Prabhakar Vaidya

February 28The metaphysics of symmetry

Sundar Sarukkai

March 14 What is psychotherapy

R L Kapur

The **guest lectures** at the Wednesday Discussion Meetings during this period included:

January 3 Re-invention of democratic citizenship

Sara Joseph New Delhi

January 31 Raga, bhava and rasa in Carnatic classical music

N R Prashanth Bangalore

February 14Pathways of the poppy: India's opium trade in the 19th century

Asiya Siddiqi Bangalore

March 21 The origin and development of classical Indian dance upto contemporary times

Leela Ramanathan Karnataka Nrithya Kala Parishat Bangalore

THE NIAS LITERARY FORUM



The NIAS Literary Forum has been established in the Institute to pursue and conduct literary activities such as play reading, reading of poetry (one's own or others'), and the reading of short stories. Currently, this forum meets on one Wednesday every month. For more details about its activities, please contact **M G Narasimhan**

Anindya Sinha presented a lecturedemonstration entitled "Eternity in many a fleeting moment: The music of Rabindranath Tagore" on March 7 at the last meeting of the Forum.

SPECIAL PROGRAMMES

There were one discussion meeting, two special lectures and and eight public lectures organised at the Institute during the period from January to March 2001:

Discussion meeting

March 9 Freedom of thought: What is it?

Ioanna Kucuradi UNESCO Chair Hacettepe University, Ankara, Turkey

Special lectures

February 15 Can we solve the Schrodinger's equation exactly for chaotic systems?

Sudhir R Jain Bhabha Atomic Research Centre, Mumbai March 16 Asia's Silicon Valley or Silicon Valley's Asia? Globalisation, state policy and the information technology industry in Bangalore

Balaji Parthasarathy Indian Institute of Information Technology Bangalore

Public lectures

January 8 Linkages of the new economy and the old

Jairam Ramesh Chairman, State Planning Board Government of Karnataka, Bangalore

January 23 Institutes for software development

Akshai Runchal President Analytic and Computational Research Inc, USA

February 23 Nyaya-Vaisesika concept of scientific studies

Sibajiban Bhattacharyya Acharya B N Seal Professor of Mental and Moral Science Calcutta University and ICPR National Lecturer for the Year 2001

February 24 Gadadhara's theory of meaning

Sibajiban Bhattacharyya Acharya B N Seal Professor of Mental and Moral Science Calcutta University and ICPR National Lecturer for the Year 2001



March 9 Human rights: Concepts and problems

loanna Kucuradi UNESCO Chair

Hacettepe University,

Ankara, Turkey

March 12 The inter-faith movement

Karan Singh

Member of Parliament, New

Delhi

March 23 The caste system – Facts and

fallacies

T R Anantharaman

Former Director, Institute of

Technology, Varanasi

and

Rector, Banares Hindu

University, Varanasi

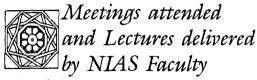
March 29 Governance in USA – Role of public administration

specialists

Mitchell F Rice

Texas A and M University,

USA



Dilip Ahuja

Delivered a talk on "GEF governance and institutional structure" at the Fourth Regional Awareness Workshop, Indian Institute of Management, Kolkata, January 19.

Delivered a talk on "The concept of incremental costs" at the Fourth Regional Awareness Workshop, Indian Institute of Management, Kolkata, January 19.

Delivered a talk on "Framework of GEF support for capacity building for the global environment" at the Regional Consultation of Capacity Development Initiative, Istanbul, Turkey, February 22.

Delivered a talk on "The feedback from the Assessment Phase" at the Regional Consultation of Capacity Development Initiative, Cape Town, South Africa, March 7.

Attended the Meeting of the Coordinating Lead Authors of Working Group III of the Third Assessment Report of the Intergovernmental Panel on Climate Change, Accra, Ghana, February 26-27.

Attended the Sixth Session of the IPCC Working Group III, Accra, Ghana, February 28-March 3.

Delivered a talk on "The concept of incremental costs in global environmental treaties" at the 15th NIAS Course for Senior Executives, January 2001.

B K Anitha

Delivered the inaugural address, entitled "Universalisation of elementary education: Government-NGO collaboration" at the Annual Children's Meet of non-formal schools run by GRAMA, a rural NGO based in the districts of Chitradurga, Hassan, Tumkur and Uttara Kannada, at Chitradurga, January 30.



Savita Angadi

Attended the Workshop on Mathematical and Computation Biology at the Centre for Cellular and Molecular Biology, Hyderabad, January 8-13.

Arvind Kumar

Delivered a talk entitled "RMA and the Air Force" at the International Seminar on Aerospace Technologies: Developments and Strategies, organised by the DRDO as part of AERO INDIA 2001, Bangalore, February 9.

Sangeetha Menon

Delivered a talk entitled "Beside the 'Intentor' and the 'Integrator': Looking at two faces of consciousness" at the Second International Conference on Integral Psychology, Aurobindo Ashram, Pondicherry, January 6.

N Shantha Mohan

Presented a paper on "Problems of women in higher education" at a state-level conference of university teachers, Bangalore, January 27.

Gave a talk on "The implementation of the guidelines and norms laid down by the Supreme Court of India regarding sexual harassment and gender justice" at a course for senior executives, organised by the National Institute of Public Administration, New Delhi, March 2-3.

Presented a paper on "Incorporating gender in education" at a meeting for teacher educators, organised by the University Grants Commission at Bangalore University, March 5.

Participated in the Workshop on Governance, organised by the Institute for Social and Economic Change, Bangalore, January 18-19.

R Narasimha

Delivered a talk entitled "Diverse country, changing times: Designing new initiatives for Indian education" at the CASTME-UNESCO-HBCSE International Conference on Science, Technology and Mathematics Education for Human Development, February 20.

S Rajagopal

Invited to participate in a conference entitled Implementing the NPT 2000 Review Conference Outcomes, organised by the Stanley Foundation, New York, USA, February 23-25.

Asha Ramesh

Delivered a talk on "Women's movement in India" at the first official commemoration of International Women's Day by the National Aeronautical Laboratory, Bangalore March 20.

Participated in a discussion on Reproductive Health Advocacy, organised by the Media Advocacy Group of New Delhi, at Bangalore, February 26.

Participated in a two-day study session to evaluate and strengthen the Annual Human Rights training programme of the Centre for Social and Development Studies, Chulalongkorn University and Forum Asia, Bangkok, Thailand, March 29-30.

Served as an Appraisal Team Member of the Karnataka Mahila Samakhya Programme, a Government of India initiative for rural women's empowerment.



Anindya Sinha

Delivered a talk entitled "Exploring the mind of the bonnet macaque" at the Chemical Society, St Joseph's College of Arts and Science, Banglore, January 9.

Conducted a discussion with high school children and undergraduate students on the theme of "Ecology, evolution and genetics" at the Bangalore Association of Science Education, Bangalore, January 13.

Delivered a talk entitled "What is it like to be a monkey?" at the Valley School, Bangalore, February 17.

Delivered an invited talk entitled "Whose life is it anyway? Some reflections on the issue of animal rights" at a seminar on Emerging Issues in Biology, organised by the Department of Zoology, Visva Bharati, Shantiniketan, March 24.

N Sudhamani

Presented a paper on the "KNSN Programme in Karnataka with special reference to Koppal District" at a meeting for government- and district-level functionaries organised by the Directorate of Mass Education, Bangalore, February 13.

A R Vasavi

Delivered a talk entitled "Child citizens and basic education" at the Indian Institute of Management, Bangalore, January 24.

Delivered a talk entitled "Structures of inequality" at the Institute for Finance and International Management, Bangalore, January 27.

Delivered a public lecture on "Exclusion, elimination and opportunity: Trends in India's primary education" at the Open Forum, organised by Sutradhar, Bangalore, February 3.

Delivered a talk entitled "Agro-ecologies: Between pluralism and individualisation" at the UGC National Seminar on Globalisation and Environment, Mumbai, February 15.

Delivered a talk entitled "Family and gender in contemporary India" to students of the International Students Travel Programme, Bangalore, February 26.

VISITORS TO THE INSTITUTE

Dr Pierre Mazzega visited the Mathematical Modelling Unit from January 29 to February 26 under the project "Bessanladu", jointly sponsored by CSIR, India and CNRS, France.

Ambassador Harry G. Barnes Jr, Senior Advisor and Consultant, Asia Society, USA, visited the International and Strategic Studies Unit on March 12.



Upcoming Events

The third round of the CISAC-NIAS Dialogue is scheduled to be held during April 26-28, 2001, and is expected to cover a wide range of topics relating to arms control and reduction regime, CTBT, US-India relations and technology transfers. The meeting is being organised by the International and Strategic Studies Unit.

The library at NIAS has been the beneficiary of a generous grant by Mr. Kanwal Kishore Grover and will be dedicated as the **Principal S R Grover Library** on May 10, 2001, in the memory of Mr Kanwal Kishore Grover's father.



The National Institute of Advanced Studies, in collaboration with John Templeton Foundation of USA, has planned an International Seminar on **Science and Metaphysics** to be held at Bangalore during June 24-27, 2001. The focal theme of the seminar is **Consciousness and Genetics**. This seminar is co-sponsored by Centre for Studies in Civilization and the Indian Council for Philosophical Research.

The lectures and participants will be neuroscientists, psychologists, physicists and philosophers working in these areas as well as interested students. About 40 to 50 participants including 10 from abroad are expected to participate in the seminar. The conference is open for all. Those who are interested in attending the conference may register their names by May 31, 2001. The Registration Fee is Rs. 50/-. For further details please contact Sangeetha Menon (smenon@nias.iisc.ernet.in).

The 3rd Training Programme for on the Indian Space Enterprise for the Indian Space Research Organisation will be held from December 3-8, 2001. For further details, please contact Dilip Ahuja (dahuja@nias.iisc.ernet.in).

Building and sustaining the intellectual and social foundations of a transforming civilisation

About NIAS

India has several fine institutions, in the natural sciences, in engineering and technology, and in the social sciences. But these institutions harbour different cultures, and, indeed, are often worlds unto themselves. And there are too few bridges between and among them. The most interesting and challenging problems of the coming century probably lie in the interfaces between these cultures and disciplines - interfaces that are studied far too little in our country. It is in these no@man's lands that I believe the future of NIAS lies - in subjects that do not belong to the tidy little pigeon holes that the current knowledge system of the world has created - artificially, and for technical or bureaucratic convenience, not because that is the way the world operates. How to build these bridges, how to bring different intellectual and social communities together, and how to look at the future of our nation and the world with the greatest possible intellectual integrity as well as public and social confidence - it is the pursuit of these aims that NIAS is taking up as its mission.

If we have to achieve these goals it is necessary for us to bring together the best in the natural and social sciences. The late JRD Tata, who conceived of this institution, saw the great need in India to form a new kind of leader – he envisioned an institution that could harness creativity and commitment, mathematics and

management. With my distinguished colleagues on the faculty of NIAS, and the eminent persons we count among our Associates, I am hopeful that we can carve a unique niche for ourselves in the public and intellectual life of this country and the world, moving in the direction that our founders so clearly saw as essential for the future health of our nation.



The appeal

The pursuit of our goals demands a measure of autonomy. We need financial support from diverse sources to ensure and sustain that autonomy. The early generosity of the House of Tatas and the Government of Karnataka has given us some splendid facilities. We now need to build on this foundation, diversify our sources of income and carry out programmes that are sensitive, at one and the same time, to public and national needs as well as to the demands of uncompromising intellectual rigour.

We solicit your contributions to help us to realise our goals. Bequests can be made to the NIAS Endowment Fund in the manner described below.

R Narasimha

Director, NIAS, and Chairman, NIAS Endowment Committee

How to make Contributions to the NIAS Endowment Fund

All contributions made to NIAS or its Endowment Fund are tax deductible under Section 35, Subsections (i) and (ii) of the Indian Income Tax Act of 1961.

NIAS is registered under the Foreign Contributions (Regulation) Act, 1976, and

is entitled to receive contributions from abroad directly (Register number 094420614, Account No. 0100005000200, State Bank of India, Indian Institute of Science, Bangalore 560 012). Contributions must be made by cheques drawn in favour of the National Institute of Advanced Studies; the cheques may be sent directly to NIAS, or credited to the State Bank of India account mentioned above with independent intimation to NIAS.

The Institute welcomes contributions of any amount. Typical sums and the purposes for which they can be used and the forms in which acknowledgements can be made are shown below.

1. Books

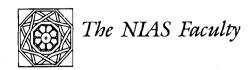
Can be donated as books or as funds to be utilised for purchase of books Every book donated or purchased out of donation funds will carry a label indicating the name of the donor

- 2. Objects of art (paintings, sculpture etc.)
 Rs 10,000/ and above
 Will carry a small plaque indicating the name of the donor
- Annual Endowed Lecture (speaker residing in India)
 Rs 2.5 lakhs or US \$ 6,000
 May be named with concurrence of donor
- 4. New Office Space
 Rs 5 lakhs per room
 Room will carry a plaque indicating
 the name of the donor
- Visiting Professor (from India or abroad)
 Rs 10 lakhs or US \$ 25,000
 May be named with concurrence of
 donor

Lecture Hall
 Rs 20 lakhs or US \$ 50,000
 May be named with concurrence of donor



- 7. East Wing, Main Building
 Rs 40 lakhs or US \$ 100,000
 May be named with concurrence of
 donor
- West Wing, Main Building
 Rs 50 lakhs or US \$ 125,000
 May be named with concurrence of donor
- Endowed Doctoral Scholarship
 Rs 10 lakhs or US \$ 25,000
 May be named with concurrence of donor
- Endowed Fellowship
 Rs 30 lakhs or US \$ 70,000
 May be named with concurrence of donor
- 11. Endowed Professorship
 Rs 40 lakhs or US \$ 90,000May be named with concurrence of donor
- 12. Endowed Research Unit Rs 80 lakhs or US \$ 187,500 May be named with concurrence of donor



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LIBRARY

Hamsa Kalyani (MLISc Bangalore) Assistant Librarian niaslib@nias.iisc.ernet.in The National Institute of Advanced Studies (NIAS) was conceived and initiated by the late Mr. JR D Tata, who sought to create an institution which would conduct advanced research in multidisciplinary areas, and also serve as a forum to bring together administrators and managers from industry and government, leaders in public affairs, eminent individuals in different walks of life, and the academic community in the natural and social sciences. The intention has thus been to nurture a broad base of scholars, managers and leaders who may contribute to tackling the complex problems facing contemporary India in a more informed and effective

The philosophy underlying NIAS is given shape by its research teams, which are drawn from a variety of disciplines in the natural and social sciences. The Institute is unique in its integrated approach to the study of intersections between science and technology and social issues.



Prof R Narasimha

Director

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