## DISE II: HE-MIS Higher Education Management Information System

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## **Background**

One of the most essential requirements of any system in general and education in particular is availability of latest information on different aspects of education/on going programmes at different levels periodically. Education in India has different levels such as pre-school, primary, upper primary, secondary and higher secondary, technical, professional and higher education levels. Data requirements and level at which information is required varies from one level to another level. Information system for each of these levels in India is at different stage of development. Whatever the information is available on all these levels is scattered and integrated educational management information system as such has not yet been developed.

Little or no information is available for pre-primary level of education. Whatever information is available for this level of education is incomplete and outdated. On the other hand, in view of limitations in the manual information system being maintained by the Department of Higher Education, MHRD, a number of initiatives were made in the recent past to strengthen elementary education information system amongst which the District Information System for Education (DISE) developed jointly by the NUEPA, Government of India and UNICEF is the most recent and prominent one. DISE has drastically reduced time-lag in availability of educational statistics in case of elementary education and it has also made available data at different levels such as from school to cluster, block, district, state and notational levels. DISE is now made operational in 604

districts across all the 35 States and UTs of the country. Both at the district and State and UTs levels, an EMIS unit has been established and necessary computer professionals and hardware and software have been provided to these units. Publication of District Report Cards, State Report Cards, Analytical Report and a number of other publications containing information on hundreds of variables on different aspects of universalisation of elementary education based on DISE data has become a regular feature. Even schoolspecific report cards in case of 1.12 million schools have been made available to users along with a 2 page descriptive report in case of each school. In view of DISE achievements, a number of states have already expanded the coverage of DISE from Elementary to Secondary and Higher Secondary levels of education in their states. Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Jharkhand, Puducherry etc. are few such states. Provisions have been made in the existing DISE software to handle information up to the Secondary and Higher Secondary levels of education and the states are extensively using the upgraded software designed by NUEPA. In addition, NUEPA has also initiated a mapping exercise to gather detailed information on Secondary and Higher Secondary level of education which will help it to prepare a status paper on universalisation of secondary education.

It is the Technical and Higher Education level of education, where no efforts have been made to strengthen MIS in the recent past. The available information on higher education is limited, outdated and is not available at all desired levels. More specifically up-to-date information is not available on many desired variables. Even basic indicator such as GER at Higher Education level is not available in ready to use form and different sources present different estimates of enrolment ratio for Higher Education. Disaggregated information in case of Higher Education is not available at all desired levels. Even, University and College-specific information is not available. The up-to-date information on Higher and Technical education, if made available can be of great help in better planning and management of education. As of now, it seems that there is no regular mechanism to develop plans specifically for Higher Education at any level. The disaggregated data when available will encourage all providers to better plan and manage

affairs of Higher Education. This would also ultimately help for better manpower planning.

The prime responsibility to collect information on Higher Education in India lies with the University Grants Commission. Prior to that it was the responsibility of the Department of Secondary and Higher Education (now renamed as Department of Higher Education) of the MHRD to collect information on Higher Education. In late 1980's, it was decided that henceforth information on Higher Education will be collected solely by the UGC. However, UGC couldn't coup up with this responsibility and later MHRD again started collecting information on Higher Education which is still in practice. In addition, UGC also collects some information through its own machinery and disseminate aggregated data through its Annual Report. The limited information that is available through the UGC's Annual Report is latest available for the year 2004-05/2005-06. On the other hand, the Department of Higher Education of the MHRD collects information on Higher Education variables through its SES forms. The limited information that the MHRD disseminates is through the Selected Education Statistics (an annual publication) which is provisional in nature and is latest available for the year 2004-05. The information that is being disseminated through the SES is more disaggregated in nature than the same in case of the UGC Annual Report. MHRD is also supposed to disseminate final information on Higher Education through its one of another publication, namely Education in India which has got several volumes but the same is latest available for the year 1986-87. MHRD sends its Data Capture Formats to the Directorate of Education across the country. In fact, these are basically the consolidated sheets and each state (Directorate of Education/College Education) used to collect information from Universities/Colleges in its state through its own machinery, consolidate the same and send it back to the MHRD in the aggregated form (state-wise). University and collegespecific information is lost in the process of aggregation and only limited data is collected and disseminated through this procedure.

In view of the above limitations, NUEPA has decided to initiate efforts towards strengthening of the Higher Education Information System as a part of its on going DISE

project (DISE II: HE-MIS). The first major step, in this direction is to develop a Data Capture Format specifically for Higher Education in consultation with all the stake holders at different levels. The existing DCFs being used by the MHRD as well as UGC will be discussed in a workshop participated by the experts. Once the draft DCF is ready, the same can be shared at lower levels (states/universities) to further improvement and also to incorporate region-specific variables. The improved version of DCFs can then be field tested which will then be followed by further modifications to give it a final shape.

Collecting Data in general and from all Universities including Deemed to be Universities and Colleges in time is not an easy task for which concerted efforts are required to be made. The proposed plan for strengthening of HE-MIS can be implemented successfully only by ensuring involvement of regulatory agency such as UGC and active participation of the Government.

The timely collection of information largely depends upon different agencies involved in data collection at different levels responsibility and accountability of all of which should be ascertained before the commencement of data collection. Another important aspect towards strengthening of DISE: HE-MIS would be to prepare a master list (directory) of all the colleges and universities by location (district/state/region) for which the exiting list, if available can be improved upon. All the Universities would also be required to prepare a compressive list of all its constituent colleges including the affiliated ones. Once the directory of Universities and Colleges is prepared, the next important major activity would be the printing and distribution of DCFs. Depending upon the total number of universities/colleges in a state, decentralization of printing of DCFs can also be explored. The DCFs can also be made available through the internet. Identification of printing agency both at the national and state levels as well as distributing agency needs to be carefully decided. How information would flow also needs to be designed carefully. Each and every level, the person involved in data collection and dissemination should be made accountable. It would be better to have a nodal officer in each state and it would be the responsibility of the nodal officer to timely distribute and collect filled-in DCFs from all the colleges and universities falling under his/her jurisdiction. Similarly, each University should also be assigned responsibility to one of its officers to collect information from all of its colleges. This is more important in Universities having large number of affiliated colleges as the same would ensure smooth collection of information.

Once the filled-in formats are received from all the universities/colleges, the important next step would be to check the coverage from the master directory to ensure complete coverage of all the Universities and colleges. Each filled-in format received will be duly checked by the concerned officer (Registrar/V-C) before the same is forwarded to the state designated nodal officer. Alternatively, the college/university may also submit the filled-in DCFs through the internet by a specified date after which no modifications will be allowed for which User Id and Password would be provided to each University and College. Alternatively, once all the DCFs are received by the state nodal officer, the same would commence data feeding through the software specifically designed for this purpose. In this fashion, all the states would send their filled-in DCFs to the designated national coordinating agency i.e. NUEPA for data cleaning, dissemination and analysis.

The frequency of data collection shall be annual with September 30 as the date of collection as has been the practice in case of all other levels of education. All colleges and universities would be assigned a unique code that would remain same for ever. The codes can either be generated automatically through the computer or they can also be assigned manually. Similarly, each and every variable included in the DCF would be given codes as this will help in generating all desired reports at all levels. Efforts would be made to make available data by all possible levels of dissemination such as college and university-specific, district/state-specific, region-specific, national or any other level in all possible ways. Number of Colleges and Universities by type of courses they offer, graduate and post graduate courses as well as by Ph.D and M.Phil courses, enrolment (male/female, General/SC/ST/OBC), teachers (male/female) by designation, age, qualification, area of specialization and experience, non-teaching staff, examination results, income and expenditure etc. all could be disseminated at all desired levels. Like District Report Cards developed in case of elementary education, University Report

Cards may also be developed and disseminated annually. Like-wise, efforts would also be made to develop College Report Cards.

Dissemination of information plays an important role in improving the utilisation of statistics. Efforts would be made to ensure easy access of data through print and electronic media as well as through the internet as the same would also be of great help in improving the quality of data so collected under DISE II: HE-MIS.

With the above background, the Departments of Higher and Professional Education and Educational Management Information System of the National University is planning to conduct a 2-day **Workshop on Designing and Development of Data Capture Formats for HE-MIS** at NUEPA, New Delhi during September 20-21, 2007 with following objectives:

- To discuss, modify and adopt Data Capture Formats for Higher Education–MIS
- > To discuss and adopt flow of information and administrative arrangements for smooth collection of information under HE-MIS
- To discuss mode of data dissemination and sharing at different levels; and
- ➤ To discuss role and responsibility of officers involved in data collection at different levels and mode of accountability.

Officers from the Department of Higher Education, MHRD, Statistical Section of UGC, Association of Higher Education, AICTE, IAMR etc will be invited to participate in the Workshop. In addition, a few experts from the Higher Education filed as well as practitioners involved in data collection from five states would also be invited to participate.

The major outcome of the workshop would be designing of Data Capture Format and to develop understanding about different dimensions concerning to successful launching of HE-MIS. A draft DCF will be designed before the commencement of workshop which would be thoroughly discussed in the workshop.