Report of the Working Group on Teacher Education for the 12th Five Year Plan

Department of School Education and Literacy Ministry of Human Resource Development Government of India

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Working Group on Teacher Education for formulation of the Twelfth Five Year Plan (2012-17).

Composition of the Working Group

1.	Ms. Anshu Vaish, Secretary, Department of SE&L, MHRD	Chairperson
2.	Ms. Vibha Puri Das, Secretary (HE), MHRD	Co- Chairperson
3.	Ms. Anita Kaul, Addl. Secretary, Department of SE&L, MHRD	Member
4.	Joint Secretary (HE), MHRD	Member
5.	Chairperson, (NCTE)	Member
6.	Prof SS Jena, Chairman, NIOS, New Delhi	Member
7.	Prof R Govinda, Vice Chancellor, NUEPA, New Delhi	Member
8.	Director, NCERT, New Delhi	Member
9.	Dr. G.N. Karna, Hon. President	Member
	Society for Disability and Rehabilitation Studies, New Delhi	
10.	Prof. Latha Pillai, PVC, IGNOU, New Delhi	Member
11.	Dr. Vasudha Garde, Director	Member
	International Students Centre, University of Pune	
12.	Principal Secretary, School Education, Govt. of Bihar	Member
13.	Principal Secretary, School Education, Govt. of H.P.	Member
14.	Principal Secretary, School Education, Govt. of Kerala	Member
15.	Principal Secretary, School Education, Govt. of Karnataka	Member
16.	Principal Secretary, School Education, Govt. of Maharashtra	Member
17.	Principal Secretary, School Education, Govt. of Sikkim	Member
18.	Principal Secretary, School Education, Govt. of Tamil Nadu	Member
19.	Director, SCERT, Lucknow, UP	Member
20.	Director, SCERT, Udaipur, Rajasthan	Member
21.	Principal, DIET, Hazaribagh, Jharkhand	Member
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23.	Prof. Anu Poonia, Principal and Dean, Faculty of Education	Member
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24.	Prof. N.B. Biswas, Professor of Education, Assam University	Member
25.	Dr. K. Dorasami, Principal, RIE, Mysore	Member
26.	Prof. A. K. Rath, Principal, RIE, Ajmer	Member
27.	Principal, St. Xavier Institute of Education. Mumbai	Member
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29.	Prof. Anita Rampal, Faculty of Education, CIE, Delhi Universit	y Member
30.	Ms. Bijli Malik,	Member
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31.	Ms. Shakila Shamsu, Joint Adviser (HRD), Planning Commissi	on Member
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Terms of Reference of the Working Group

- (i) To review the implementation of teacher education programmes including the functioning of DIETs, SCERTs, SIEMATs, and to make a realistic estimate for demand for teachers in the XI Plan and beyond as also to assess the need for preservice and in-service training in terms of manpower and infrastructure.
- (ii) To review the status of teacher education programmes and examine the infrastructural and other facilities in teacher education institutions.
- (iii) To suggest ways of restructuring and re-organization of Teacher Education Programme so as to make it out-come oriented and stipulate time bound monitorable outputs/objectives.
- (iv) To suggest ways to bring entire domain of Teacher Education under higher education and ways for organically linking DIETs, SCERTs, CTEs, IASE, University departments.
- (v) To assess the vacant faculty position in teacher training institutions and suggest how open and distance education and ICT infusion can serve to circumvent this issue.
- (vi) To review Academic Staff Colleges and capacity development programmes for faculty in higher and technical education.
- (vii) To develop a comprehensive faculty development programme for continuous training and retraining of teachers.
- (viii) To examine the various academic programmes in teacher education and rationalize the same to make it target oriented for various levels and avoid duplicity of programmes.
- (ix) To examine and address the issue of lack of special teachers for the differently abled and for their appropriate training.
- (x) To suggest norms for bench marking/best practices in teacher education so as to raise the standards of SCERTs/DIETs/IASEs/CTEs/ASCs and evolving a rating scale for teacher training institutions.
- (xi) To evolve a clear programme for training in ICT enabled classroom pedagogy and use of ICT in teaching of all subjects on the lines of the ICT policy in schools and also in higher education.
- (xii) To assess the financial requirements for teacher education programmes for the XII Plan period.
- (xiii) To define the role of the private sector in providing teacher education in the XII plan.

Proceedings of the Working Group

The First Meeting of Working Group on Teacher Education was held on 10.6.2011. In the meeting, it was decided to constitute a sub-group under the Chairpersonship of Prof AK Sharma, which was requested to make recommendations on enhancing the quality of teacher education in its various dimensions. The sub-group submitted its Report in September, 2011, which was placed for consideration of the Working Group in its meeting held on 23rd September, 2011. The Report of the Working Group was finalised thereafter.

Chapter I: Preamble and Policy Context of Teacher Education

1.1 Preamble

- 1.1.1 The enactment of the RTE Act 2009 reasserts a political commitment of the state towards the education of the masses of India. However, the challenges of Universalisation of Elementary Education (UEE) remain only partially addressed so long as the state hesitates to focus its energies on revitalizing the sector of teacher education which has remained largely stagnant since colonial times. The goal of achieving UEE is likely to remain elusive unless the centrality of the teacher is recognized in the process of educational reforms.
- 1.1.2 The past decade has been a period of great stress for the state school system. Indicators of this include the shift of school-going population away from state schools to private schools in search of quality; the proliferation of a sub-standard and unregulated private school sector as well as Teacher Education Institutes (TEIs) and the increasing informalisation of the school system with the increase of under-qualified cadre of para teachers. At the same time, India has witnessed a remarkable growth in democratic participation and self-governance, following the implementation of the Panchayati Raj, and numerous advances made towards the recognition of human rights of the downtrodden and marginalized groups. The past decade has been marked by important achievements in the sphere of women's rights and special provisions to overcome regional disparities. The Sarva Shiksha Abhiyan (SSA) with its emphasis on elementary education since 2003 and the more recent emphasis on secondary education through the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) hold the promise of continued leadership provided by the center for initiatives to be taken by the states. The challenge lying ahead is to recognize and enhance the role of teachers in shaping the social transformation India is witnessing.
- 1.1.3 While the RTE commits the state to provide free and compulsory elementary education (grades I-VIII) to children of 6 to 14 years of age, most states do not have a systemic provision of a cadre of elementary level school teachers. Moreover, the nomenclature used in the classification of teacher education programmes, approved by the *National Council for Teacher Education (NCTE)*, for the elementary stage of education varies from state to state and the existing classification is not consistent with the Constitutional commitment. Due to this inconsistency, a number of contradictions have arisen in the process and structure of school education and its impact has been felt in teacher education as well. Teachers teaching up to grade VIII, whether in composite, primary or middle schools, need to be considered as a professional cadre requiring a process of training that addresses the specific learning and developmental needs of children up to 14 + years.

1.2 Policy Context of Teacher Education

- 1.2.1 The earliest policy formulations emphasized the need for teacher education to be "...brought into the mainstream of the academic life of the Universities on the one hand and of school life and educational developments on the other" (Kothari Commission, 1964-66). It is indeed a matter of concern that TEIs continue to exist as insular organizations, even within the University system where many are located. Recognising 'quality' as the essence of a programme of teacher education, the Commission recommended the introduction of "integrated courses of general and professional education in Universities...with greater scope for self-study and discussion...and...a comprehensive programme of internship."
- 1.2.2 Subsequently, while observing that "...what obtains in the majority of our Teaching Colleges and Training Institutes is woefully inadequate..." the Chattopadhyaya Committee Report (1983-85), reiterated the need "...to enable general and professional education to be pursued concurrently..." and emphasized that "...an integrated four year programme should be developed carefully...(while also making it) possible for some of the existing Colleges of Science and Arts to introduce an Education Department along with their other programmes allowing for a section of their students to opt for teacher education."
- 1.2.3 The National Policy on Education (NPE) 1986/92 recognized that "...teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs of and capabilities of and the concerns of the community." The policy further states that "...teacher education is a continuous process, and its pre-service and in-service components are inseparable. As the first step, the system of teacher education will be overhauled."
- 1.2.4 The Acharya Ramamurti Committee (1990) in its review of the NPE 1986 observed that an internship model for teacher training should be adopted because "...the internship model is firmly based on the primary value of actual field experience in a realistic situation, on the development of teaching skills by practice over a period of time."
- 1.2.5 Commenting on how the inadequacy of programmes of teacher preparation lead to unsatisfactory quality of learning in schools, the Yashpal Committee Report (1993) recommended that "...the content of the (teacher preparation) programme should be restructured to ensure its relevance to the changing needs of school education. The emphasis in these programmes should be on enabling the trainees to acquire the ability for self-learning and independent thinking."
- 1.2.6 The NCF, 2005 with its focus on the concerns of the learner and the NCFTE, 2009 with its focus on the teacher provide new opportunities to intervene in the otherwise neglected sector of teacher education. Connecting knowledge to life outside the school

and enriching the curriculum by making it less textbook-centered are two important concerns of the NCF. In order to help children move away from rote learning, teachers will need to be prepared to give children the opportunity to derive meaning from what they read, see, hear and experience. This is possible only when teachers are able to play an active role in the design of learning materials, and have the knowledge and capacities to organize meaningful learning experiences and to use assessment as means to improve their own performance. For this to happen, the teacher needs several support mechanisms, including a pool of learning resources to choose from, the capacities and sensibilities to identify developmentally appropriate text materials, a critical and analytic mind and the opportunity to engage children with learning resources outside the classroom.

1.2.7 The NCFTE, 2009 provides the necessary space and vision for a convergence between school curriculum and the education of teachers. The challenge lies in enabling an appropriate institutional response for the concrete realization of this new vision through the Five Year Plan (FYP) schemes.

Chapter II: Addressing the Challenge of UEE and Social Transformation

2.1. Higher Education-School Linkages

2.1.1 The critical engagement of university-based academics and professionals has been characteristic of the articulation of the NCF, 2005; its precursor - the 21 position papers on critical areas of school education, the NCERT's new school textbooks and the NCFTE, 2009. Academics from across different disciplines of central and state universities along with school practitioners have participated in this mammoth exercise through the aegis of the NCERT but without an enabling provision for an official and collective institutional mandate that such challenging tasks demand. Indeed, in each of these engagements, which need not be taken to be separate and sporadic 'tasks' - whether it is the academic restructuring of the school level textbooks, or its associated orientation of teachers - universities have a major institutional role to play, significantly now, even more at the national level.

2. 2 Education as an Inter-disciplinary Pursuit

- 2.2.1 Education is an interdisciplinary area in that it has to draw on various other disciplines such as psychology, sociology, philosophy, history and economics. While this has helped in giving the discipline a more comprehensive and inclusive character; it has not enabled a dialogue towards a discourse that is distinct and is capable of addressing 'real' issues. Inter-disciplinarity has been largely an exercise in collating different strands of knowledge from diverse disciplines within the educational umbrella, but has not forged a blurring of boundaries, enabling inter-disciplinary enquiry.
- 2.2.2 Moreover, the fragmented and often fragile linkages that exist between educational theory and praxis, especially within the developmental perspective of a country such as ours, have further confounded the crystallisation of a unified and well-articulated discourse that can organically engage with issues in the field. Theorists have tried to maintain the distinctiveness of specific 'pure' disciplines, while practitioners have defined education as an 'applied' field, seeking whatever theoretical insights different disciplines may provide for specific but discrete problems.
- 2.2.3 Traditionally, knowledge has been seen as something static that is imported across a boundary, from the external to the internal. Traditional theories of 'acquisition' of knowledge, concepts and skills tend to separate the actor from both the 'acquired knowledge' as well as the social context in which it may be 'acquired' or later 'applied'. However, there is a growing need to shift away from traditional theories that isolate and distance the learning 'mind' from its experience, and evolve inter-disciplinary theoretical frameworks of 'situated' learning that do not separate thought, action, feelings and belief systems of learners. In our context, where millions of children enrol in school but are evidently 'not learning', underscores the importance of problematising the question of 'school knowledge' and redefining our understanding of 'learning',

through an inter-disciplinary engagement with the learner. The NCF, 2005 and the NCFTE, 2009 have situated the curriculum debate in this frame.

2.2.4 An interdisciplinary platform for teacher education, educational research and practice needs to be established through structures that make provision for widening the base for the intake of teacher educators and teacher trainees. This can be done through a focus on +2, undergraduate and lateral disciplinary entry in courses on education especially in areas of critical gaps in the social sciences, sciences, mathematics and languages. Inter-disciplinary postgraduate programmes of study in elementary and secondary education with specialization in Curriculum Studies, Pedagogic Studies and Assessment need to be designed such that students may opt for credit courses offered in different Departments of the University. This would help develop a cadre of professionals such as curriculum developers, pedagogues in sciences, social sciences, languages and mathematics; facilitate students to engage with critical areas of research in the field, thereby developing the discipline through the creation of a body of knowledge in the Indian context. This will not only enable education for social transformation but university-linked social action for educational transformation; linking social and natural science research with educational theory and practice and developing a forum for the development of Education as an interdisciplinary area, rather than a generalist area of knowledge.

2.3 Suggested Strategies based on Policy and Educational Context

2.3.1 The qualitative and quantitative gaps in teacher education, and its effects on the schooling system, have been highlighted in the Approach Paper to the XII Plan. In light of the mandate of the RTE Act and its implications for the teacher education system, there is a need to explore possibilities of shifting from a Schematic approach, as reflected in the Centrally Sponsored Scheme on Teacher Education, to launching a National Mission on Teacher Education in the XII Plan, which would encompass within its fold not only teacher education institutions, but address important issues such as professional development of teachers, teacher status and accountability, all of which are germane to the quality of school teachers, and their role in shaping the classroom environment. Unarguably, a lot of these issues, including service conditions, pay and incentives for professional growth, etc. would lie largely in the domain of the State Governments and local authorities, who are the largest employees of school teachers. Nevertheless, the need to launch a National Mission, with targeted outputs and outcomes in a pre-defined time frame, cannot be overemphasised.

2.32 In the overall context of improving the teacher education system, following specific strategies need to be adopted:

(i) Addressing Systemic Gaps

- Carve a central role for public institutions at the state and the central level, with space for Non-Government Organization (NGO) and private sector innovations.
- Build on existing institutions and capacities mixed with significant institutional and curriculum reform to enhance quality, accountability and cost-effectiveness.
- Institute University-Teacher Education institutional link at the elementary level and strengthen existing linkages for secondary education by providing structural spaces for interdisciplinary research and school-based activities.
- Revamp the Scheme of Teacher Education that builds on a nationwide array of university-based, state and district based teacher education institutions and SSA functionaries right-down to the Block and Cluster level.
- The infrastructure created by Government of India in every district in the form of DIET to be recognized as a permanent structure of teacher education and not as a project.
- Restructure DIETs, CTEs, IASEs and SCERTs to enable hands-on training of school teachers and other practitioners such as the BRCs and CRCs.
- Establish a separate cadre for teacher educators specializing in elementary education in SCERTs and DIETs.
- Modify policy guidelines to enable direct recruitment of teacher educators.
- Fill vacant teacher educator posts across the state and district institutions in a time-bound manner as a matter of priority.
- Establish institutional twinning arrangements with Departments of Arts, Humanities, Sciences and Social sciences in select Central and State Universities and deemed Universities.
- Place disadvantaged groups and regions at the centre of scheme formulation.
- Augment resources for teacher education institutions.
- Plan increased intake of trainee teachers in the reserved categories and for subjects in which candidates are not available.
- Roll out the four year integrated B.El.Ed. programme for teachers at the elementary level and four year integrated B.A-Ed, BSc-Ed programmes for teachers at the secondary level with vertical linkages for higher studies in multidisciplinary areas of study.
- Encourage flexibility and diversity rather than uniformity across teacher education programmes and institutions for the conduct of pre-service teacher education. Teacher education institutions to be given the space to formulate innovative models for pre-service course structure, content and design.
- Establish networking and coordination mechanisms for national and state level teacher education institutes.

• Extend the benefits, quality and regulation of university/public teacher education interventions to private institutions on a cost-sharing basis.

(ii) Addressing Gaps in Content

- Enable the convergence between school curriculum and teacher education goals, strategy and instruments as envisioned in the NCFTE, 2009.
- Build linkages between pre-service and continuing professional development of teachers (in-service teacher education) with on-site classroom support within a central policy thrust on achieving a balance between pre-service and in-service training.
- Create special strategies to train para-teachers and other under or unqualified teachers to professional standards and arrest the recruitment of para teachers through an enabling regulation mechanism under the RTE Act.
- Empower teachers and teacher educators to use ICT as a tool through easy electronic institutional access to curriculum materials and for training teachers.
- Invest in revamping teacher education programmes to break the academic isolation and insularity of existing arrangements, in the light of NCFTE, 2009.
- Reconceptualise curriculum and pedagogic approaches to teacher education, in the light of NCFTE recommendations; both at the elementary and secondary level ensuring integration between disciplines, theory and practice, subject content and pedagogy along with a long-duration programme of school internship.
- Address the needs of teacher specialization especially in crucial areas of sciences, social sciences, mathematics and languages.
- Design programmes and institute mechanisms for the professional development teacher educators.

Chapter III: The Centrally Sponsored Scheme on Restructuring and Reorganization of Teacher Education: Genesis and Overview

- 3.1 The Centrally Sponsored Scheme (CSS) of Restructuring and Reorganisation of Teacher Education was initiated in 1987 pursuant to the formulation of the National Policy on Education (NPE), 1986. The NPE stated that improvement in the status and professional competence of teachers is the cornerstone of educational reconstruction. It envisaged teacher education as a continuous process with pre-service and in-service training being its inseparable components. It emphasised the significance and need for a decentralised system for the professional preparation of teachers, and it was in this context that District Institutes of Teacher Education (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Study in Education (IASEs) were established.
- 3.2 In its original form, the scheme comprised of five components, namely (a) setting up 400 DIETs, (b) strengthening 250 CTEs, and development of 50 of them as IASEs, (c) strengthening of SCERTs, (d) orientation of five lakh school teachers every year, (e) establishment and strengthening of Departments of Education in Universities. The Scheme has been continued with modifications in the 8th, 9th and 10th FYP periods. It was last revised in 2002 and currently comprises the following components (a) establishment of DIETs, (b) upgradation of Secondary Teacher Education Institutions into CTEs and IASEs, and (c) strengthening of SCERTs.
- 3.3 There is a need to revise existing Scheme for Reorganisation and Restructuring of Teacher Education in order to meet the exceptional challenges for the teacher education system arising from the massive spatial and numerical expansion of schooling facilities at the elementary and secondary levels and the corresponding increase in the demand for teachers. Modification of the scheme is also critical in the context of the policy decision for universalisation of secondary education.
- 3.4 An important development has been the enactment of the RTE Act, 2009. This Act, which has come into force with effect from 1^{st} April, 2010, has important implications on the teacher education system in the country. The Act inter alia provides as under:
 - (a) the Central Government shall develop and enforce standards for training of teachers;
 - (b) the Central Government shall provide technical support and resources to the State Government for promoting innovations, research, planning and capacity building;

- (c) The Appropriate Government (Central Government and State Governments) shall provide training facility for teachers;
- (d) The Central Government shall notify an academic authority to lay down minimum qualifications for a person to be eligible for appointment as a teacher.
- (e) All teachers should acquire the prescribed minimum qualification within a period of five years.
- 3.5 The Department of School Education and Literacy, Union Ministry of HRD had in 2007 prepared a proposal for modification to the Restructuring and Reorganization of the CSS on Teacher Education which was considered by the Expenditure Finance Committee (EFC) in its meeting held on 13th November, 2007. It was, inter alia decided that the Department should undertake a comprehensive evaluation of the Scheme. Accordingly, the Department entrusted the evaluation to the National Council for Educational Research and Training (NCERT). The NCERT submitted its Report in August, 2009. The Report of the NCERT was shared with the State Governments and other stakeholders. The Government also held four Regional Seminars in which extensive consultations were held with the State Governments on the findings and recommendations contained in the Report and their views on revision of the Scheme were obtained. The main recommendations of the Report of the NCERT are as under:
 - a. The Scheme should have a sharing pattern of 75:25 between the Centre and the States (90:10 for the North Eastern (NE) States).
 - b. The existing DIETs should be strengthened in several ways, including providing them an extended mandate of imparting in-service training to secondary and senior secondary school teachers, improving their infrastructure and reorganizing their organizational structure.
 - c. A small percentage of DIETs (10%) could be considered, in the short run, for up-gradation so as to perform additional functions of secondary level preservice training, 4-year integrated Elementary Teacher Education programme and pre-school teacher education course. DIETs should have linkages with universities, colleges and well established private institutions;
 - d. Existing CTEs and IASEs should be strengthened and more such institutions could be established depending on the specific needs of the States;
 - e. Establishment of a DIET in a block in 196 identified districts with Minority/SC/ST concentration. In the remaining blocks of the country, Block Institutes of Teacher Education (BITEs) should be established for providing

in-service training to teachers at levels of the school. The existing BRCs would get subsumed in the BITEs.

- f. The SCERTs need to be re-vitalised as lead state-level academic institution and should develop links with universities. All existing State Institutes of Education (SIEs) to be upgraded as SCERTs.
- g. Curriculum and syllabus of pre-service teacher education courses should be revised in the light of NCF-2005. Programmes of TEIs should focus on education of children with special needs;
- h. For attracting good professionals, pay scales of the faculty of the TEIs should be upwardly revised; salary and pay scales of UGC could be followed for the academic positions. The posts of the TEIs should be encadred. Career Advancement Scheme should be provided for internal upward mobility.
- i. Funding procedure should factor in regional variations and provide extra funds to meet local necessities. Central funds should be routed directly to State Education Secretaries, then to the SCERTs for onward disbursement to the IASEs, CTEs and DIETs. State budget heads should factor in the state's share and Central assistance.
- 3.6 Recent analysis made by the Department of Education shows that at present there are 5.23 lakh vacancies of school teachers at the elementary level and the provisions of Pupil Teacher Ratio specified in the Schedule of the RTE Act would lead to additional requirement of around 5.1 lakh teachers. Moreover, around 7.74 lakh teachers are untrained, that is, they do not possess the prescribed qualifications. Further, there are large inter-state variations in terms of percentage of untrained teachers, vacancy of teacher posts, additional requirement of teachers under the RTE and the capacity of the TEIs to prepare professionally trained teachers. Assam, Bihar, Chhattisgarh, J&K, Jharkhand, Orissa, Uttar Pradesh and West Bengal together account for 6.06 lakh untrained teachers and 9.73 lakh teacher requirement. These States also have inadequate capacity for teacher preparation.
- 3.7 The need to revise the Scheme during the XII Plan would be guided by the following factors:
 - (a) Integrating teacher education with overall education development in the States;
 - (b) The need for expansion of capacity of the TEIs especially in some of the deficit States of the East and the North-Eastern Region;

- (c) Addressing the problem of large number of untrained teachers and the possibility of large number of persons being recruited (because of the Pupil Teacher Ratio (PTR) specified in the RTE Act) without possessing the prescribed professional qualification;
- (d) Expanding institutional capacity to prepare large number of secondary school teachers and provide in-service training for the secondary school teachers, in light of the RMSA.
- (e) To link elementary teacher education with the higher education system
- (f) To develop and put in place a mechanism to monitor the implementation of the Scheme on various physical and financial parameters with pre-defined outcomes for improving the overall quality of various activities of the teacher education institutions.

Chapter IV: Review of Teacher Education in the 11th FYP

4.1 District Institutes of Education and Training (DIETs)

DIETs are nodal institutions for improving the quality of elementary education in the district. They were mandated to transact pre-service and in-service training programmes for elementary school teachers. In certain small districts of the country, which do not require a full-fledged DIET, there is provision for establishing a District Resource Centre (DRC). At present 571 DIETs have been sanctioned of which 555 are functional. The NCERT evaluation Report has made some important findings regarding functioning of the DIETs which are summarised as under.

- Physical Infrastructure and academic facilities are inadequate to perform all the functions mandated for the DIET
- There are a large number of vacant posts, especially of academic posts which has had an adverse impact on the conduct of programmes and activities
- Recruitment of teacher educators has been largely by way of deputation from the school system and the State Education Department, with little effort taken to build a professional cadre of teacher educators
- All the seven branches are not functional
- DIETs have continued to conduct pre-service course on the basis of out-dated of curriculum and efforts to revise the curriculum have been rather slow
- DIET faculty work in near isolation from other institutions, leaving limited opportunities for faculty development
- Large vacancy of academic staff has also led to limited number of research and extension activities

4.2 *Colleges of Teacher Education (CTEs)*

CTEs conduct pre-service and in-service training for secondary school teachers. They also provide extension and resource support service to secondary schools. The scheme provides Central assistance up to a maximum of Rs.1 crore per CTE.

4.2.1 Report on Evaluation of CTEs

The NCERT Report on evaluation of the Scheme has given some significant findings regarding the functioning of CTEs which are summarized as under.

- (a) Large variations in infrastructure facility; inadequate infrastructure for staff room, library, laboratories, lecture and seminar halls, hostel facilities in several of the CTEs
- (b) Most CTEs have less than 50% of requisite strength of academic and technical staff
- (c) No provision for direct recruitment of academic posts; Little attention to staff strengthening after upgradation
- (d) Several CTEs have not availed of Central assistance; Delays in utilization of grants
- (e) large inter-state and intra-state variations in conduct of in-service programmes
- (f) Very few CTEs have undertaken research projects
- (g) Only 40% of sampled CTEs have undertaken curriculum material development
- (h) Faculty development limited to some CTEs and restricted to participation of some in-service training programmes

The Report has recommended that, in view of the important role that these institutions are expected to perform, especially in the context of the RMSA, the existing CTEs should be strengthened in terms of organisational structure, academic programmes, human resources, financial support, etc. More CTEs may be set up wherever required. However, there should be a clear rationale for setting up new CTEs. These institutions, in order to improve the quality of secondary education, shall conduct training need analysis and base line surveys for organizing training programmes. They shall prepare context-specific teacher handbooks and training modules for quality training. They shall also undertake impact studies to study the effect of training programmes on classroom processes and learning outcomes. They shall prepare implementation guidelines for conducting plan activities including training and projects for ensuring optimum utilization of funds with financial accountability.

4.3 *Institutes of Advanced Study in Education (IASEs)*

The IASEs prepare elementary and secondary teacher educators through preservice and in-service programmes. They also conduct research and provide academic guidance to DIETs and resource support to CTEs. The current scheme provides central assistance up to a maximum of Rs 2.25 crore per IASE.

4.3.1 Report on Evaluation of IASEs

In respect of the IASEs, the findings of the NCERT Report are summarized as under:

- (a) IASEs not established in all States; some are not functional
- (b) Buildings require renovation; some IASEs have inadequate space for laboratories, in-service programmes and research activities;
- (c) 50% of IASEs have less than 50% of sanctioned academic posts filled; Several IASEs have not appointed additional staff after up-gradation
- (d) Large inter-state variations in recruitment methods
- (e) Very few IASEs are conducting M.Ed and M.Phil programmes
- (f) Limited no. of IASEs are conducting in-service programmes
- (g) Areas such as research, curriculum material development and faculty development are neglected
- (h) IASEs not optimally availing of Central assistance

The Report has recommended that, in view of the important role that these institutions are expected to perform, especially in the context of the RMSA, the existing IASEs should be strengthened in terms of organisational structure, academic programmes, human resources, financial support, etc.

4.4 State Councils of Educational Research and Training (SCERTs)

At present there are SCERTs in 25 States and SIEs in Assam, Arunachal Pradesh, Jammu and Kashmir (2), Sikkim, Andaman and Nicobar Is., Uttar Pradesh and Chandigarh. Central Assistance is currently provided to SCERTs on a 50:50 sharing basis, subject to a maximum of Rs 1.00 crore per SCERT for the duration of the entire plan period, for:

- (a) strengthening infrastructure up to a limit of Rs 50 lakhs over the entire Plan period.
- (b) establishment of special cells for Computer and English education

- (c) specific projects such as training need assessment, development of curriculum and material for teacher education, capacity building of teacher educators, and
- (d) faculty development through exposure visits.

4.4.1 Report on Evaluation of SCERTs

Study conducted by the NCERT has led to the following findings in respect of the SCERTs/SIEs:

- (a) Infrastructure and physical facilities such as hostels, toilets, laboratories, etc. are either not available or inadequate;
- (b) Staff positions in SCERTs/SIEs vary across States. Many of the SCERTs are inadequately staffed and around 50% of sanctioned positions are vacant in most of the SCERTs.
- (c) SCERTs, except in Delhi and Tamil Nadu, do not have a separate cadre and faculty is drawn from other institutions, including from schools, some of whom are posted on ad hoc basis.
- (d) Administrative support is weak, and posts of administrative staff such as administrative officers, stenographers, clerks, accountants and other Group C and D posts have not been filled up.

SCERTs are visualized as lead academic institutions at state level providing support to DIETs, CTEs, IASEs and also engaging in educational research and training. They should function along the lines of NCERT at the state level, engaged in providing advice to state governments on policy issues, support to implementation and appraisal of programmes and to undertake programmes for quality improvement in school education and teacher education.

Chapter V: Thrust Areas for the 12th Five Year Plan

The starting point of a National Mission on Teacher Education would be to address the quantitative quality gaps in teacher education enumerated in Chapter II. This would require focus on the following thrust areas:

- (i) Modification in Centre-State financial sharing pattern
- (ii) Continuation of support to and restructuring of DIETs;
- (iii) Establishment of Block Institutes of Teacher Education (BITEs)
 - (a) Augmenting teacher education capacity in high deficit States
 - (b) Augmenting Teacher Education capacity in SC/ST and minority concentration areas
- (iv) Continuation of support to CTEs and establishment of new CTEs
- (v) Continuation and support to IASEs and establishment of new IASEs
- (vi) Continuation of support to SCERTs/SIEs
 - a) Strengthening and re-structuring of SCERTs,
 - b) Training for Educational Administrators, including Head Teachers.
 - c) Orientation / Induction Training to Teacher Educators
- (vii) Training of untrained teachers
- (viii) Professional development of Teacher educators
- (ix) Technology in teacher education
- (x) Integrating elementary teacher education with higher education
- (xi) Preparation of teacher educators
- (xii) Public-Private Partnership (PPP) in teacher education
- (xiii) Strengthening /monitoring mechanism

Part A: Strengthening/Modification of Existing Structures/Schemes for the 12th Five Year Plan

5.1 *DIETs*

- 5.1.1 In light of the findings and recommendations of the NCERT evaluation Report, and the requirement of providing in-service training to secondary school teachers, the norms of Central assistance should undergo the following modifications:-
 - (i) Condition for Central Assistance Study conducted by the NCERT and reports received from the State Governments indicate that large vacancies of academic and non-academic posts exist in several DIETs. State Governments have been rather slow in filling up the vacancies in the DIETs/DRCs. Further, most State Governments have not created a separate cadre of teacher educators, even though they were required to do so. Both these factors have undermined the capacity of the DIETs to perform their functions efficiently. There is therefore an urgent need for placing a

condition that central assistance would be released to the State Governments in respect of the existing DIETs/DRCs only if the State creates a cadre of teacher educators and fill up all the vacancies expeditiously and ensure that at no stage would the vacancy exceed more than 5% of the sanctioned strength. In respect of new DIETs, all the sanctioned posts should be filled up within a period of 2 years of their establishment.

- (ii) Criterion for Setting up Fresh DIETs/DRCs - At present, the criterion for eligibility of a district for setting up of a fresh DIET/DRC is that the said district should have been in existence as on 1.4.2002. However, State Governments have been stressing that those districts which have been created after 1.4.2002, should also be considered for sanction of DIETs, as otherwise, the requirement of teachers in the new districts remains unaddressed. Therefore, DIETs may be sanctioned in respect of all new districts which come into existence in the States/UTs upto March, 2011. At present 571 DIETs have been sanctioned as against 626 districts in the country. Accordingly, DIETs need to be sanctioned in the remaining 55 districts. Non-recurring Central assistance to be provided for establishment of a DIET (by upgrading an existing elementary teacher education institution or, where no such institution exists, by establishing a new institution) in the newly created districts on the basis of a Plan prepared by the State Government in respect of the proposed DIET in accordance with the infrastructural norms for establishment of a DIET given in the MHRD Guidelines, 1989 applying the specifications and State SOR. In respect of a district where a new DIET has to be established, the proposal would be considered only after the State Government has allotted land, along with necessary permissions, for its establishment. For the purposes of estimation, around Rs 3.5 crore would be required per DIET for civil work and equipments.
- (iii) Strengthening infrastructure of existing DIETs- In the existing guidelines, it has been provided that additional Central assistance upto a maximum of Rs.20.00 lakh per DIET would be available for strengthening of infrastructure of existing DIETs, especially with reference to provision of water, electricity and boundary wall, on a strictly need-based criterion. State Governments have been emphasizing that the existing buildings of DIETs/DRCs, some of which are more than 25-30 years old, are in dire need of renovation which would enable them to prolong the life of the buildings. Further, several of the DIETs do not have the full component of the infrastructural facility as provided in the MHRD guidelines, 1989. Therefore, the said provision of the guidelines may be modified to include "renovation of buildings, expansion and modernisation". Further, the existing amount of Rs. 20.00 lakh is not adequate for strengthening

infrastructure. Therefore, additional non-recurring Central assistance may be provided during the 12th FYP to enable these DIETs to upgrade their facilities at par with the MHRD guidelines. State Governments would prepare proposals in this regard in accordance with the specifications and State SOR. It is estimated that on an average an amount of Rs 1 crore per DIET would be required for such works.

(iv) Reorganization of DIET Structure - The DIETs need to be strengthened in all respects in terms of organisational structure, physical infrastructure, academic programmes, human resources, financial support etc. In view of the large requirement of training of teachers under the RMSA, DIETs will be responsible for in-service training secondary school teachers. This would require a reorganization of the existing DIET structure. Moreover, as the study by NCERT has indicated, while there are seven branches in a DIET, several of the branches have either been non-functional or partly functional, while some have outlived their utility. The inflexibility in the organizational structure of the DIET has led to sub-optimal utilization of its human resources and its inability to allow innovation and prioritization of its activities.

In order to allow the DIETs to have flexibility in utilizing its human resources in an optimal and efficient manner, it would be desirable to specify the various programmes and activities that they are expected to perform and allow each DIET to reorganize its resources depending on the importance of one or more programme/activities for each of them. A Committee consisting of a representative of the SCERT, Principal and Senior lecturers of the DIET and the District Education Officer (Elementary and Secondary Education) should recommend a re-organized structure of the DIET, to the Secretary Education/Director, SCERT. Alternatively, the Secretary Education of the State Government should, in consultation with academic bodies such as SCERT, prepare alternate models of the DIET structure which would then be adopted by the DIETs in the State. The Teacher Education Approval Board (TEAB) will be the final authority to approve changes in the organizational structure and all proposals should be brought before it for approval.

The DIET would be nodal agency at the district level to conduct in-service training of elementary and secondary school teachers of government and government aided-schools, including preparation of modules for the training programmes. The Annual Action Plan to be prepared by each DIET should include the detailed Plan on in-service training of secondary school teachers also. The Budget provision for various components of in-service training under the SSA and the RMSA should be taken into account while

preparing the Annual Action Plan for DIETs. Plan Approval Committee in the DIET shall prepare the holistic annual District Plan for teacher training and related activities in consultation with all the stakeholders.

In the light of the proposed mandate of the DIET for secondary schools, their institutional linkages with BRC/CRCs and their role at the District level under the RTE Act for teacher training, the DIETs will be overall responsible for activities relating to teacher education and school quality/school improvement in the district, and work with the Block Institutes for Teacher Education (BITEs), BRCs and CRCs towards:

- (a) Organising and Conducting a high quality pre service teacher education programme for elementary school teachers
- (b) Organising and supporting teacher professional development (including Head Masters)
- (c) Academically monitoring and supervision of schools, school improvement and school development.
- (d) Serving as a Education Resource Centre for the District extended to reach teachers in conjunction with the BRCs and CRCs.
- (e) Meeting district specific needs in areas such as district specific material development, research and action-research programmes for special groups in the District.
- (f) Developing the District Academic Plans and monitoring the quality of schools and teaching in the context of the Right to Education, and coordinating the work of other agencies which may be working and contributing to the strengthening of the public education system in the district.

The programmes of the DIET and its structure may be re-organized around the following academic wings/units:

1. The Pre-Service Teacher Education programme would provide high quality curriculum for the education of elementary school teachers, with a special focus on understanding childhood, community, and child development, emergent literacy and numeracy and the inclusion of physical education and creative and performing arts. Understanding school curriculum and

- educational aims would enable student teachers to learn to make sound educational judgments' about aims of education.
- 2. The In-service Teacher Education programmes would work for the development of Master Resource Persons (especially for training at the block level) as well as direct work with teachers with a view to continuously enhance understanding of and better quality of planning and implementation of all parts of the curriculum. An effective system of split-design trainings and school follow-up will be put in place. Specific areas for attention include early literacy, numeracy and inclusive education, and science, mathematics and social sciences education for classes V-VIII and secondary school. This work will be carried out in close coordination with BRCs and CRCs, and the use of a training management system. Information Technology (IT) would be effectively used for various outreach and extension programmes. In respect of in-service training of secondary school teachers, DIETs would undertake this function only if (a) there is no CTE to cater for the district; or (b) the jurisdictional CTE of the area is unable to fulfill this requirement, either because of its inadequate institutional capacity or because of the large number of teachers to be trained necessitating the DIET to supplement the function of the CTE.
- 3. Leadership and Management education for Heads and Senior teachers of schools and school development and monitoring groups (including members of community) would be provided on a continuous basis to strengthening the academic functioning of schools. School and teacher supervision conducted by Block and Cluster personnel would also be strengthened through such trainings.
- 4. *Inclusive Education and Special Focus Groups* programme would focus specially on the needs of groups identified in the district as requiring special efforts to achieve educational standards, including SC, ST, girls, minorities (including linguistic minorities), children with special needs, etc.
- 5. Academic Planning and Review group would be responsible for gathering and maintaining data relevant to developing an understanding of the status of quality of schools in the district and the effective achievement of the vision of the RTE Act. The group would also coordinate efforts of other institutions working

in the district in the area of school and teacher development towards strengthening the public education system. This group would be supported by a trained statistician as well as data entry operators.

- 6. The Education Resource and Documentation Centre would provide a rich range of resources and ideas for the use of teacher educators, teachers, student teachers and various education functionaries in the district. It would also oversee the effective use of ET, IT and ICT in schools as well as in teacher education. This programme will be supported by a fully qualified Librarian and Assistant Librarians with an understanding of educational materials. Labs (Science, computer, work, art/craft) where they are present, would be integrated into this Wing of the DIET.
- (v) Academic Status of DIET Faculty- An important recommendation of the NCERT Report is to attract good professionals. In the DIET Guidelines, the various posts of DIET staff have been linked to administrative ranks of the State Education Department. For instance, the Principal of a DIET is equivalent to the rank of Deputy Director in the State Education Department. However, DIETs should be recognized as academic bodies, independent of the rank and duties of administrative personnel of the State Education Department. Over the years, a situation has arisen wherein there has been frequent movement of personnel from State Education Departments and schools to DIETs and vice-versa. Very few States have created a separate cadre of teacher educators, leading to dilution of the quality of the academic functions in the DIET.
- (vi) Vehicle Facility-Vehicle facility may be provided in all the DIETs in view of the fact that activities of the DIETs, including action research, field study and visit to schools requires a great deal of mobility for the DIET faculty.
- (vii) *Upgrading DRCs into DIETs* All the District Resource Centres (DRCs) may be upgraded into full fledged DIETs.
- (viii) Pattern of Central Assistance Under the existing Scheme, each DIET is provided recurring Central assistance for salaries (@ Rs 38 lakh, with state contribution at the level of 2000-01 to be maintained), programme activities (@ Rs 17 lakh), contingencies (@ Rs 5 lakh), computer contingencies (@Rs 0.50 lakh) and faculty development (@ Rs 1 lakh). The modifications suggested are as under.

- a. Salaries for all posts created and filled after up-gradation (for an upgraded DIET) subject to State contribution in respect of all posts sanctioned prior to up-gradation, and for all posts in respect of new DIETs. On an average the salary component works out to Rs 70 lakh per DIET;
- b. In respect of programmes and activities, central assistance would be based on an Annual Plan of activities which would be prepared by each DIET on the basis of the actual needs and capacity of the institution, giving the physical and financial implications of each activity, subject to a maximum of Rs 30 lakh per DIET. These Plans would be collated for the State as a whole in the State Annual Work Plan. In respect of inservice training programmes conducted by DIETs from resources provided under the SSA/RMSA, the Annual Plan should clearly indicate the specific programmes and coverage so funded;
- c. Contingency component of Rs 15 lakh per DIET, to meet day-to-day expenses, including recurring expenditure upto Rs 3 lakh for vehicle facility;
- d. Faculty Development of Rs 5 lakh per DIET, subject to submission of an Annual Plan of activities (physical and financial implication) for each DIET.

5.1.2 DIET as an Innovation Centre

5.1.2.1 DIETs have been visualised as lead institutions at the district level to provide academic and resource support to elementary school teachers. In view of the child centric assumptions of NCF 2005, which have also been reiterated in section 29 of the RTE Act, a new approach to pedagogical practices has to be understood and adopted by the in-service teachers. This approach also needs to be imbibed by the student-trainees in the teacher education institutions. DIETs, which form the institutional link between prospective teachers and the school system, have a major role to play in developing innovative methodologies of teaching-learning practices, as also to encourage teachers and children to reach out to the larger community. DIETs can also act as the hub for drawing a pool of the best teachers, both of government and private schools, which can provide academic support to the teachers, especially in Maths, Science and Social Sciences.

5.2.1.2 It is proposed to involve the Innovation Centre at IIM Ahmedabad as well as the National Innovation Council to run orientation courses on Innovations in Education for the SCERT staff for all states in the country; who in turn will orient the DIET staff on the

subject. The following other main issues have been suggested, to promote innovations in education:

- DIETS should work on the areas of interest to the local community such as local flora and fauna, local history, culture, arts and crafts and through this involve the local community in furthering the aims of education for all.
- There should be greater use of ICT for promoting innovation. A web based portal should be created to highlight innovations in educational activities undertaken in the various States of the country
- The ICT should be utilized extensively to facilitate talks by experienced speakers on innovations in education for the DIET teachers.
- The planning and monitoring unit should assume the overall responsibility for development of the education sector in the district. They should have all the data and a clear analysis of the weakness and strengths of the system and be encouraged to bring in innovative practices to address the weaknesses.
- The DIET should through teacher-trainees as well as the school children endeavour to spread awareness about malnutrition, hygiene and education in the districts.
- The DIETs will be incentivised to undertake research at the school level to study and document good practices and new approaches to pedagogy, and disseminate them in the schools;

5.2 *CTEs*

- 5.2.1 During the XII Plan, norms for central assistance to CTEs may be revised in the following manner.
 - (i) Relaxing Existing Norms Under the present norms, one CTE can be set up for every three districts. In view of the growing need for training of teachers at the secondary level, and the requirements of trained teachers under the RMSA, it is considered necessary to relax the existing norms, and allow for establishment of new CTEs on need basis, on the request of the State Governments, taking into account the total number of teachers at the secondary level to be trained. However, only existing secondary teacher education institutions would be upgraded into a new CTE.
 - (ii) *Provision for Contingency Grant* At present, there is no provision for contingency grant in respect of CTEs. Therefore, these institutions are facing difficulties in their day-to-day functioning. In order to strengthen these institutions, it is necessary that suitable contingency grant is provided to them.

- (iii) *Vehicle Facility* CTEs require vehicle facility in view of the functions to be performed by them. It is proposed to provide recurring assistance under the Contingency head for meeting expenses incurred for vehicles.
- (iv) *Enhancing Financial Assistance*-Recurring and non-recurring financial assistance is proposed to be increased in view of the increases in costs under various heads.
- 5.2.2 To avail Central assistance, State Governments must ensure that all the posts of academic and non-academic staff in the CTE are filled up expeditiously and the vacancy should not exceed 5% of the sanctioned strength. In respect of a new CTE, all sanctioned positions must be filled up within 2 years of its establishment. Centrall assistance to CTES would undergo the following revisions.
 - (i) Non-recurring Central assistance to existing CTEs for strengthening and upgrading their infrastructure in accordance with the infrastructure norms of CTEs outlined in the MHRD Guidelines. Each CTE will prepare a perspective Plan of the physical and financial requirements based on the specifications and State SOR, along with time lines for completion of the work. For the purposes of estimation, Rs 1 crore per CTE would be provided.
 - (ii) Recurring Central assistance would be provided for expenditure on salary, programmes and activities, including contingency grant of Rs 15 lakh per year (for meeting day-to-day expenses, including recurring expenses on vehicle). Each CTE will prepare a detailed Annual Plan for the various programmes and activities to be undertaken during a year, along with programme content, objectives, duration and coverage. The estimates for salary would be in accordance with the existing norms. However, to avoid duplication of resource support, where the CTE is also availing of grants under the RMSA for in-service training of teachers, the same should be indicated in the Annual Plan. For the purposes of estimation, an amount of Rs 50 lakh per CTE would be provided.
 - (iii) In respect of new CTEs which are established during the 12th FYP period, non-recurring Central assistance would be provided for upgrading the infrastructure of an existing secondary teacher education institution in accordance with the infrastructure norms of CTEs outlined in the MHRD Guidelines, 1989. Each CTE will prepare a perspective Plan of the physical and financial requirements based on the State SOR, along with time lines for completion of the work. For the purposes of estimation, Rs 1.5 crore per CTE would be provided for up-gradation of facilities, including for equipments. It is expected that 30 new CTEs would be set up by the end of the XII Plan period.

5.3 IASEs

- 5.3.1 At present 31 IASEs have been sanctioned. The criterion for setting up an IASE in a State is: (a) State with 20 districts or less 1 IASE; (b) States with 21-40 districts 2 IASEs; and (c) States with more than 40 districts 3 IASEs. However, in view of the important role of IASEs in teacher education, and the enhanced role envisaged for them (as stated in paras below), during the XII Plan effort should be made to upgrade all Departments of Education in Central and State Universities into IASEs during the 12th FYP.
- 5.3.2 The IASEs will be additionally required to set up units/centres that would undertake in-depth work in specific areas including research and material development in areas of Curriculum Studies, Pedagogic Studies, Assessment and Evaluation, apart from the responsibility of educating teachers and teacher educators. This will ensure the development of a professional cadre of teacher educators with specialized skills.
- 5.3.3 These Institutions would also act as Regional Resource Centres, each catering to state-owned TEIs in the vicinity as a resource Centre for these institutions for various activities, including development of curriculum and learning material, educational planning and administration, development of modules for training of educational administrators. The institutions can be supported by a Technical Support Group (TSG), drawing specialists in teacher education from within the region. To avail Central assistance, the controlling authority (University/State Government) must ensure all posts of academic and non-academic positions in the IASEs are filled up before the completion of the 11th FYP, and thereafter, the vacancy should not be more than 5% of the sanctioned strength. In respect of a new IASE, all sanctioned positions must be filled up within 2 years of its establishment. Components for which Central assistance would be provided to IASEs are as under.
 - (i) Non-recurring Central assistance to existing IASEs for strengthening and upgrading their infrastructure in accordance with the infrastructure norms of IASEs outlined in the MHRD Guidelines, 1989. Each IASE will prepare a perspective Plan of the physical and financial requirements based on the specifications and State SOR, along with time lines for completion of the work. For the purposes of estimation, Rs 1.25 crore per IASE would be provided.
 - (ii) The IASEs require vehicle facility in view of the functions to be performed by them. It is proposed to provide recurring assistance of Rs 3 lakh under the Contingency head for meeting expenses incurred for vehicles.

- (iii) Recurring Central assistance would be provided for expenditure on salary, programmes and activities, including contingency grant of Rs 15 lakh per year (for meeting day-to-day expenses, including expenses on vehicles). Each IASE will prepare a detailed Annual Plan for the various programmes and activities to be undertaken during a year, along with progarmme content, objectives, duration and coverage. The estimates for salary would be in accordance with the existing norms. However, to avoid duplication of resource support, where the IASE is also availing of grants under the RMSA for in-service training of teachers, the same should be indicated in the Annual Plan. For the purposes of estimation, an amount of Rs 50 lakh per IASE would be provided.
- (iv) All Departments of Education in Central and State Universities would be upgraded into an IASE during the 12th FYP period. For the purpose, non-recurring Central assistance would be provided for upgrading their infrastructure in accordance with the infrastructure norms of IASEs outlined in the MHRD Guidelines, 1989. Each IASE will prepare a perspective Plan of the physical and financial requirements based on the specifications and State SOR, along with time lines for completion of the work. For the purposes of estimation, Rs 1.25 crore per IASE would be provided for up-gradation of facilities, including for equipments. It is expected that 50 new IASEs would be set up by the end of the 12th FYP period.
- 5.3.4 The IASEs may also be encouraged to start the 4-year B. El. Ed programme. This is an integrated degree programme which has proved to be very effective in improving the quality of teaching in schools both in Government and private schools. Several institutions, including the University of Delhi have been running this programme successfully. The programme includes a variety of courses on Contemporary Society, Child Development, Language across the curriculum and Core Mathematics/Social Sciences besides specialising in one liberal discipline and also provides extensive opportunities for practical work. Trainees passing out of this programme can study further Masters in various disciplines, including M. Ed so that they have a career option of becoming teacher educators.

5.4 SCERTs

5.4.1 Under section 29(1) of the RTE Act, the State Government has to appoint an academic authority to lay down the curriculum and evaluation procedure which would be followed by all schools in the elementary level. Given their existing mandate, most of the States have notified the SCERT as the academic authority to perform this function. This involves not only laying down the curriculum and evaluation procedure but also to

develop a system for assessment and evaluation of the learning achievements on a continuous basis.

- 5.4.2 The scope of the functioning of the SCERT must encompass curriculum development, preparation of proto type teaching learning material and text books for all levels of school education and teacher education. The existing curriculum and syllabus of the teacher education courses will have to be revised in light of the NCF 2005 and the NCFTE.
- 5.4.3 The SCERT should be the nodal agency in the state and establish proper coordination and collaboration with various statutory bodies like Board of Textbooks, Board of Secondary Education and Board of Elementary Education. Along with its inservice responsibilities, the SCERT should attempt at evolving meaningful, short term and long term teacher education programmes on specific themes of specialization for secondary and senior secondary teachers, administrators and teacher educators. Besides these, doctoral and post graduate programmes in education/teacher education for early primary to secondary stages should be offered by SCERT. Designing and implementing such programmes would also help them in visualising the relevant inputs for in-service teacher education. Adequate opportunities for continuously updating the capacities of SCERT faculty should be created so that they can discharge their responsibilities effectively.
- 5.4.4 Training for Educational Administrators, including Head Teachers: SCERTs/SIEs should also develop appropriate training material and conduct training for Education Administrators, including Head Teachers. With the emergence of Panchayati Raj Institutions (PRIs) and the empowerment of Village Education Committee (VECs) and School Managing Committee (SMCs) (section 21 of the RTE Act), head teachers and district/ sub-district level education administrators must acquire new perspectives on planning and management. The programme components will include a vision on decentralized planning and management of educational programmes, including school leadership programmes for head teachers. The programme would be conducted in a cascade model in which the SCERT would develop resource persons for imparting the training.
- 5.4.5 *Orientation / Induction Training to Teacher Educators*: The newly recruited teacher educators of DIETs/DRCs should have strong grounding in curriculum, pedagogy and research. They shall be given orientation training (induction) for a period of 14 days by the SCERTs/SIEs by utilizing the expertise of academicians from national/regional level institutions such as NCERT, NUEPA, TIFR, TISS, RIEs, etc. With each DIET having a faculty of 23 academic staff, 1,265 new recruits would be provided induction training during the first two years of the 12th FYP. It is, therefore considered necessary to impress upon State Governments to play a proactive role in revitalizing the functions of the SCERTs through administrative and resource support. At the same time,

the Central Government should provide greater resource support to the State Governments in enabling them to revitalize the SCERTs.

- 5.4.6 In view of the proposed role of SCERT, details of functions of the divisions should be worked out in such a way that discharging them will be necessarily in the context of the overall school and teacher education. Staff requirement for these departments should be accordingly worked out. It is recommended that adequate faculty positions be created with sufficient technical and support staff. The technical staff should have capacity to provide support in organizing the activities related to science, mathematics and language labs, art and craft, physical education and yoga, ICT etc. Each State will have to assess its needs in terms of faculty and infrastructure depending upon actual demand for various facilities and their current availability. The components of Central assistance proposed to be provided to the SCERTs are as under.
 - (i) Non-recurring central assistance for strengthening of physical infrastructure (civil works, equipments, hostel facilities, repairs and renovations, etc) of the existing SCERTs to enable it to upgrade its facilities in accordance with the infrastructural norms. Each SCERT would prepare a perspective plan of its physical and financial requirements based on the specifications and the State Schedule of Rates (SOR), along with the time plan, for completing the process of strengthening of infrastructure For the purposes of estimation, Rs 2 crore per SCERT has been taken as an average requirement, including for equipments;
 - (ii) Non-recurring Central assistance for establishment of Special Cells/Laboratories for Science, Mathematics, Social Studies, Educational Technology/Computer and Language/English education, on the basis of estimates prepared by States in accordance with the State SOR. For the purposes of estimation, Rs 50 lakh per SCERT has been provided;
 - (iii) Recurring assistance for undertaking specific projects for academic activities such as curriculum/material development (including for pre-service teacher education courses such as D.Ed.), training, research, including functions envisaged under section 29(1) of the RTE Act Rs 20 lakh per SCERT per year;
 - (iv) Capacity building of faculty of SCERT Rs 10 lakh per SCERT per year for conducting various programmes, in collaboration with Universities, RIEs, etc., for capacity building of faculty of the SCERTs;
 - (v) Salaries of faculty and staff of SCERTs, in respect of additional posts sanctioned and filled after the introduction of the revised scheme, in accordance with the requirement of an organizational structure for SCERT. While the exact outlay will depend on the number of existing posts and new

posts created after up-gradation of the SCERT, for the purpose of estimation, on an average an amount of Rs 1 crore per SCERT is being provided for meeting this expenditure;

- (vi) Each SCERT/SIE will prepare modules for the training programme of 5-days' duration, for training of educational administrators, including Head Teachers, which would be imparted to 40 participants in the DIETs by the SCERT/DIET faculty or resource persons specially hired for the purpose and four such training programmes would be conducted in each DIET every year. This would cover around 5.76 lakh participants over the next 6 years. However, the coverage would increase as more DIETs are established and States can manage to conduct more number of such programmes each year.
- 5.4.7 The Project Approval Board on Teacher Education would approve the perspective plan for the development of the SCERT during the 12th FYP period. These approvals would be based on specific proposals received under the aforementioned components from the State Government, including physical and financial estimates of the proposals. Year-wise release of funds will depend on the availability of fund for this purpose. States which have an SIE instead of SCERT would also be eligible for the aforementioned Central Assistance. However, they would need to upgrade the SIE into a full-fledged SCERT or merge into the existing SCERT.
- 5.4.8 There is a long felt need for developing quality reading material for student-teachers and resource material for teacher educators in local language. However, thus far, this area of activity has been neglected which has adversely affected the transactions of the teacher education courses. An extensive effort should be made to translate good reading material for teacher educators in the local languages, to improve the effectiveness of the teachers and the quality of the learning outcomes. The model curriculum prepared by NCTE has excellent reading material but it is not available in the local languages and acts as major constraint to quality teacher education. It is proposed that the SCERTs may utilise the resources available under the National Translation Mission for translating quality reading and resource material in the local language, which can then be disseminated to the student-teachers and teacher educators.

5.5 National Council for Teacher Education (*NCTE*)

5.5.1 The NCTE is a statutory body vested with the responsibility of maintaining quality standards in teacher education institutions. Performing this task is obviously linked to regulating the establishment of teacher training institutions in accordance with the specified norms and matching the need for quality teachers. Uncontrolled growth of the number of privately managed teacher training institutions in the recent years has led to the unevenness in the quality of teacher training institutions. There has

been a mushroom growth of low quality private institutions. This situation has become alarming in some of the states where inspite of the ban imposed on opening of teacher training institutions, particularly for the elementary stage, the institutions have sprung up, obviously with the clearance from the NCTE. This has created an anomalous situation which has led to filing of several Special Leave Petitions (SLPs) in the Hon'ble Supreme Court. In order to understand the gravity of the situation, the Hon'ble Supreme Court has constituted a Commission on Teacher Education under the Chairmanship of Justice J.S. Verma, Former Chief Justice of India. The Commission is charged with a responsibility of giving a fact finding report on 291 institutions recognized for D.El.Ed. course in Maharashtra, apart from giving its expert advice on improving the regulatory functions of the NCTE as well as recommendations on total transformation of the quality of teacher education.

5.5.2 The NCTE is in the process of giving a fresh look to the norms and standards it has laid down for various teacher education courses. It has evolved a National Curriculum Framework for Teacher Education (NCFTE) in 2009/10 which gives directions for developing the new course outlines for various teacher education courses reflecting the philosophy in NCFTE and the National Curriculum Framework (NCF) 2005.

B New components for the 12th Five Year Plan

5.6 Establishment of Block Institutes of Teacher Education (BITEs)

5.6.1 Augmentation of pre-service teacher education capacity in high deficit States

5.6.1.1 Provision of teachers is basic to all educational processes. The implementation of RTE Act, 2009 and the RMSA calls for teacher provisioning to address the issue of diversity, equity and quality. The availability of professionally qualified teachers at all levels of school education is going to be mandatory within five years time. Given the enormity of the situation of untrained teachers especially in the North Eastern States and uneven supply and demand of teachers in the States of Assam, Bihar, Chhattisgarh, Jharkhand, Orissa, Utter Pradesh and West Bengal it is necessary to address the disparities in the provisioning of Elementary Teacher Education Institutions.

Table 1: Teacher Education in High Deficit States

State	No. of untrained	Annual	Annual	Teacher	
	teachers	Capacity for	capacity for	requirement	
		D. Ed.	B. Ed.	(Vacancy + RTE)	
	(high no. of	(low capacity for teacher		(large teacher	
	untrained teachers)	supply)		demand)	
Assam	30,525	1,320	4,370	4,992	
Bihar	1,65,510	2,000	6,110	3,23,233	

Chhattisgarh	30,519	2,070	9,880	34,985
Jharkhand	59,734	1460	5,550	98,424
Orissa	33,090	3,290	1,775	37,901
Uttar Pradesh	1,24,964	18,240	1,13,400	3,15,175
West Bengal	58,091	4,230	13,747	1,49,470
Total	5,02,433	32,610	1,54,832	9,59,687

5.6.1.2 The above data presents a very critical situation of elementary teacher preparation in these states. Most of the untrained teachers at the elementary level are from the States having inadequate teacher education capacity. Private sector participation is also very limited at the elementary teacher preparation level in these States.

5.6.2.3 Table 1 presents an obvious conclusion, viz. these States would not be able to prepare qualified persons from the existing capacity of teacher education institutions and, therefore face a serious supply-side crisis for meeting the RTE requirements, apart from seriously undermining the quality of class room transaction (as most of such transaction is taking place with low- and under-qualified teachers). In respect of these States, therefore, there is a need to establish more pre-service elementary teacher education institutions. Further, States like Bihar have a large number of elementary state-owned pre-service teacher education institutions which are either non-functional or partly functional. During the XII Plan Central assistance needs to be provided to these States for establishment of new elementary teacher education institutions and for upgradation of existing state-owned elementary teacher education institutions. These institutions, called Block Institutes of Teacher Education (BITEs) would be established in a block of a district, other than the block in which a DIET exists. Over the next five years, around 200 new institutions would be established in these States, including upgradation of existing state-owned elementary teacher education institutions into BITEs. The modalities would be as under.

- (i) Each State Government will prepare a perspective plan of the demand and supply of teachers over a 5-year period, the existing capacity of teacher education institutions for preparing qualified teachers, and project the additional requirement of elementary teacher education institutions;
- (ii) The State would identify the existing state-owned elementary teacher education institutions which could be upgraded into BITEs.
- (iii) The State Government would identify the blocks/districts where it intends to establish new pre-service elementary teacher education institutions, along with time lines for their establishment and the academic year from which it intends to commence the course;

(iv) The State Government would prepare a detailed financial estimate of the proposal in accordance with the specifications and the State SOR

5.6.2.4 The State Government would at the time of sending the proposal to the Ministry ensure that land for establishment of the institution has been earmarked and all necessary approvals for construction on the said land have been obtained.

5.6.2 Augmenting Teacher Education capacity in SC/ST and minority areas

5.6.2.1 There are a large number of districts having high concentration of SC/ST and Minorities where there is an urgent requirement of setting up elementary pre-service teacher training institutions to ensure preparation of elementary school teachers from amongst persons from the community. While the policy for elementary education has a foundation for inclusive education and includes strategies for sensitization of teachers to the specific needs of children belonging to SC/ST and minorities, the establishment of these institutions would ensure access to good quality teacher education facilities for rural and remote areas and facilitate the entry of talented persons, particularly persons from SC/ST and Minority concentration areas, into the teaching profession. This would help ensure the participation of SC/ST and minority groups in the teaching profession and also overcome the shortage of locally based teachers in these areas to be employed in elementary schools.

5.6.2.2 The Ministry of Minority Affairs, Government of India had obtained 'in principle' approval of the Cabinet on the proposal to set up Teacher Education Institutes in minority concentration areas. The Ministry of Minority Affairs has prepared a list of 90 Minority Concentration Districts (MCDs) based on the 2001 census data on population, socio-economic indicators and basic amenities indicators. Similarly, list of districts with SC population above 25% and ST population above 50%, based on 2001 Census data is available. While the proposal was for establishment of such institutions for both preservice and in-service training of teachers, only pre-service elementary teacher education institutions may be established in these areas, as DIETs, along with the BRCs are already catering to the in-service needs of the teachers of the district.

5.6.2.3 During the XII Plan 196 BITEs may be established - one such Institute in a block of each of the 90 MCDs and the SC/ST dominated districts (other than the block in which a DIET is sanctioned), for which Central assistance would be provided. The 196 districts would include 92 districts of the 7 high deficit States – Assam (14), Bihar (8), Chhattisgarh (6), Jharkhand (8), Orissa (6), Uttar Pradesh (36) and West Bengal (14). The manpower requirement and infrastructural facilities to be provided in the BITEs would be in accordance with the Norms and Standards of the NCTE. These institutions would only be imparting pre-service elementary teacher education courses and therefore would be distinct from the DIETs (which have several functions, pre-service being only one of them). The Central Government would provide recurring (salaries of

academic and non-academic posts sanctioned and contingency grant for meeting day-to-day expenses of the institution) and non-recurring Central assistance (for civil work and equipments) to the State Governments.

- 5.6.2.4 According to the NCTE norms, an institution imparting a 2-year D. Ed programme has to have a built up area of 1,500 sq. meter. It should have 1 Principal, 6 Lecturers, 1 Librarian and 2 Office Assistants. For the purposes of estimation, an amount of Rs 2.00 crore would be required (Rs 1.5 crore for civil work and Rs 50 lakh for equipment) for establishment of the institution. For construction of 50 seater hostel, one each for boys and girls, an amount of Rs 75 lakh is estimated. Recurring expenditure is estimated at Rs 35 lakh (Rs 30 lakh for salary of academic and non-academic staff and Rs 5 lakh for contingency grant).
- 5.6.3 Strategy for establishing BITEs In view of the large number of available non-governmental elementary teacher education institution, possibilities may be explored for utilizing the available resources in the existing institution, with the Government sponsoring the admission of eligible persons from these communities to seek admission in these institutions. The strategy may be prioritized in the following sequence:
 - (a) Possibilities should be explored of approaching well performing private teacher education institutions of admitting eligible persons from the SC/ST/Minority communities to the teacher education course; the Government would meet the costs of tuition and other fees in respect of persons so admitted;
 - (b) Identify an existing elementary teacher education institution in the district, other than a DIET, which can be up-graded as a BITE;
 - (c) Explore the possibility of using unused capacity or for increasing the capacity of the DIET in the district for admitting eligible persons from these communities to the teacher education course;
 - (d) Establish a new BITE (in a block other than the one where the DIET is established).

5.7 Training of Untrained Teachers

- 5.7.1 Recent years have witnessed massive recruitment of teachers, including the appointment of thousands of untrained teachers. While this has helped increase access to schooling facilities, it has also created a large gap in professional standards of teaching.
- 5.7.2 As per current estimates, there are 5.48 lakh untrained teachers at the primary level and 2.25 lakh untrained teachers at the upper primary level, apart from a very high percentage of untrained teachers at the secondary and senior secondary level. Eight states Bihar, Jharkhand, Jammu & Kashmir, Orissa, West Bengal, Uttar Pradesh,

Assam and Chattisgarh together account for 6.06 lakh untrained teachers at the elementary level. Given the large numbers and uneven spread of untrained teachers, there is a need for evolving decentralised strategies for organizing training for untrained teachers (including untrained para teachers). Given the disparate academic qualifications of the untrained teachers, ranging from Class VII/VIII to Class X/XII, across the country, it is important to design and organise a variety of modules specific to the training needs of these teachers, with certain non-negotiable principles and components of professional education and training. With the enactment of the RTE Act, it has now become incumbent upon every State Government to ensure that the untrained teachers acquire the minimum prescribed qualification within a period of five years.

- 5.7.3 Broadly the following four categories of elementary school teachers are to be trained and empowered in various competencies: content, pedagogy and contextual issues. They are:
 - Untrained teachers
 - New entrant teachers
 - Working teachers (trained)
 - Para teachers
- 5.7.4 *Capacity Building*: It is essential to strengthen both physical and human resource support for strengthening the ODL system. All ODL institutions offering teacher education programmes require strengthening its capacity in course design and development, and more importantly the student support services network. ICT integration to the ODL system could support on the aspects related to implementation of policy framework, pedagogy, capacity enhancement and training, technology infrastructure and connectivity, research, advocacy and collaboration.
- 5.7.5 Development of Open Educational Resources: The Open Educational Resource (OER) materials are the digitized version of the learning materials that are available freely and openly for learners, teachers and scholars to use and re-use for teaching learning and research activities. The OER has become a worldwide movement not only for acquisition of knowledge in a digitized form but it has also the significant characteristics to be a repository of updated knowledge. OER are that form of digitized materials which are offered freely and openly to educators, students and others, who have interest to use and re-use them for teaching, learning and research purposes. The computer, bandwidth, tools and implementation resources form the part of both hardware and software components in developing this digitized resources which facilitates open contents to be accessed and used. The hosts of learning materials are developed through collaborative and networking ventures online. The customized learning materials are developed through groups of experts and give ample scope for appropriate free content license, which is in use.

- 5.7.6 *Open Distance Learning (ODL) for Teachers Empowerment*: At present States are adopting various strategies for training of the untrained teachers. In Madhya Pradesh, the untrained teachers have been provided training under open distance programme of the M.P. Bhoj University. In states such as Bihar and Jharkhand the open distance D. Ed programme of IGNOU is being offered to the untrained teachers. In most of the NE States, a 6-month certificate programme of IGNOU is being availed of. Under the SSA, an amount of Rs 6,000 per teacher is provided for undertaking a two-year programme for the untrained teachers, with a 60-days contact programme each year.
- 5.7.7 However, the coverage of these programmes has not been adequate, both quantitatively and qualitatively. For instance, in respect of the untrained teachers of NE Region, several of them do not even have the prescribed educational qualification, viz. senior secondary or equivalent. The 6-month CPE programme of IGNOU does not enable the untrained teacher to acquire the prescribed qualification. A Committee established by the NCTE, which examined the IGNOU programme of Bihar, has pointed out several qualitative gaps, both in the content of the modules and the manner in which it is being conducted. Further, untrained teachers in several States and, within States, a large number of such teachers, have still not undergone any programmatic intervention to acquire the prescribed qualification.
- 5.7.8 States will, therefore, need to prepare comprehensive time-bound plans for the enabling the untrained teachers to acquire the prescribe qualification (both academic and professional) to be executed in a mission mode and completed by 2014. This would involve one or more of the following measures.
 - (a) Identification of institutions (such as the National Institute of Open Schooling (NIOS) or State Open Schools) which would enable the untrained teachers to acquire the minimum academic qualification (Class XII) and preparation of course content in local language. This is already happening in respect of the untrained teachers of West Bengal;
 - (b) Identification of institutions (such as IGNOU, State Open Universities, SCERTs) for conducting a 2-year open distance Diploma course on Elementary education, preparation of specially designed course content in the local language;
 - (c) Identification of study centres for contact programmes (DIETs, schools, BRCs, etc) and preparation of mentors for teaching in the contact programmes.
 - (d) Recognition from the NCTE for the 2-year programme;
 - (e) Development of a monitoring mechanism to ensure effectiveness of the programme.

5.7.9 The above issues need to be taken into account under the SSA for providing funds to States for training of untrained teachers.

5.8 Professional Development of Teacher Educators

5.8.1 Continuous up-gradation of professional and academic capabilities is necessary not only for practicing teachers but also for teacher educators. Therefore, special emphasis would be given in the 12th FYP periods for professional renewal of teacher educators.

5.8.2 Refresher Courses: Refresher Courses for teacher educators in government and government aided teacher education institutions (DIETs, DRCs, CTEs and IASEs) need to be put in place. University Departments of Education may, therefore, be supported to offer specially designed refresher courses to Teacher Educators. NUEPA and NCERT will become proactive participants in the organization and conduct of such courses. Existing norms for conduct of refresher courses through Academic Staff Colleges could be utilized for the purpose. 50 such Institutions could be identified to prepare and impart 21-days refresher modules in 2 cycles each year, consisting of 40 participants each. Accordingly, around 4,000 teacher educators would be covered each year.

5.9 Technology in Teacher Education

5.9.1 ICT for Teacher Education: In the 12th FYP, an important thrust area would be to introduce technology in teacher education in order to promote openness for adaptability to new technology for developing professionalism. There is also a need to encourage practicing innovation through introduction of new methods that are extremely interactive, beyond classroom traditional methods, makes learning enjoyable, promote self study and self paced. The central theme of the deployment of technology in teacher education is bringing transformations in the institutes of teacher education responsive to the technology and effective support to teacher training programmes, including SCERTS and DIETs. The ultimate purpose of ICT supported teacher education programme is to create (ICT) empowered teachers. An ICT empowered teacher should be:

- able to use computer without being computer expert do word processing, use spreadsheet, prepare PPTs, etc.
- use simple other technologies like mobile phone effectively almost 90% features of mobile phones today have educational features;
- quickly adapt to new software e.g. Open Source Software, branded software of different generation, Web 3.0 technologies like digital pens, digital readers, handheld projectors, etc.
- access and effectively use Internet for learning.

- use computers, various features of mobile phones (calculator, video and still photography, audio recording, FM radio, stop watch, converters, dictionary, note pad, etc.) and other technological devices to make his/her job easy and enriched.
- access Internet regularly for research, learning resource material development, sharing slides and audio-visual material, etc.;
- uses Web 2.0 tools like Blogs and Wikis for professional purposes;
- resort to telephone and video conferencing through computer and mobile telephony for professional purposes;
- retrieve knowledge and learning materials from OERs and technology platforms;
- create own Blogs and Wikis and contribute learning resources to Educational Web portals;
- optimally use mobile telephony
- 5.9.2 In 12th FYP the ICT based teacher education programme should create an ICT based on-demand teacher support system, including modular self-learning modules. These need to be online, as well as through CD and paper-based versions. This may enable the teacher to be more empowered in the context of:
 - allow a teacher to identify his/her strengths and weaknesses in a topic;
 - provide the teachers information on common mistakes and misconceptions students have on that topic;
 - videos where students explain reasons for their views;
 - concrete tips on teaching specific concepts and topics [often linked to specific misconceptions]
 - videos of teachers teaching that topic
 - access to research on the topics critical to Teacher Education

5.9.3 Establishing Centre for Research on Intelligent Teaching Systems

- This will be an interdisciplinary centre between education, pedagogy and cognitive science researchers on the one hand and computer science / Artificial Intelligence researchers on the other
- The aim is to research on and build *intelligent teaching systems* (in line with significant work that has happened internationally on the area of Intelligent Tutoring Systems) such systems would help provide children individualized learning opportunities especially in areas like reading, basic Maths, etc.
- The centre will also research the effectiveness of these systems and how they can be integrated into

• the teaching –learning systems and complement the teacher's efforts.

5.9.4 Improving Quality in Teacher Education through ICT

- In order to encourage teachers to create quality learning materials and also create a pool of such materials and share them with other teachers, competition will be organized at the national level. The competition will allow teachers to create different kinds of educational material (eg. questions, teaching aids, ICT-based teaching ideas, etc.)
- An annual conference on ICT in Teacher Education with a focus on participation by teachers and schools will be organized. The forum will be organized by an agency having expertise in organizing seminars and conferences
- Fund a book / journals on 'ICT in Teacher Education'

5.9.5 Infrastructure-related initiatives

- The idea of providing laptops for every teacher has been discussed on various fora. Assuming 60 lakh teachers @ Rs 20,000 each, this is an outlay on Rs. 1200 crore which is a large amount. Instead of providing the laptop to each teacher, a laptop to each teacher who demonstrates interest and application in the field.
- Provide high speed internet connection to DIETs, CTEs. IASEs and SCERTs that demonstrate their ability to use it well.

5.9.10 Capacity Building-related initiatives

- PPP courses to offer ICT skills to teachers. Teachers may do the course with any provider, but the reimbursement to the provider will be based on the teacher clearing an independent external assessment.
- Creation of video banks, question banks, etc.
- All teacher education colleges must have defined Internet and ICT requirements and internet access costs will be borne from the plan funds.

5.9.11 Database of Teacher Education

 A detailed database of teacher education, including government institutions like DIETs, BRCs, etc, government colleges, private colleges and details of their personnel will be created so that accurate information on these is available on demand. • ICT for students versus teachers need to be promoted.

5.10 Preparation of Teacher Educators

5.10.1 The requirement of appointing qualified persons as teachers in schools under the RTE Act, 2009 has important implications for institutional capacity for preparing qualified persons, which in turn has implications on the capacity of Universities, etc. in preparing teacher educators for the teacher education institutions. At present there are 98 Departments of Education in Universities and 48 Government Post-Graduate Colleges offering M. Ed programmes (essential qualification for a teacher educator of an elementary teacher education programme) with an annual intake of 4,315. Along with private institutions offering M. Ed programme, the total annual intake is 21,068.

5.10.2 The spatial spread of these institutions, however, is extremely uneven, with States in urgent need of teacher educators having inadequate institutional capacity for preparing teacher educators. Table-3 indicates the institutional capacity for teacher educators in respect of such States.

Table 2: Institutional Capacity for Teacher Educators

State	No. of recognized	Annual
	M. Ed courses	intake
Bihar	3	75
Chhattisgarh	11	400
Jharkhand	2	25
Orissa	35	1,110
Uttar Pradesh	111	1,860
West Bengal	7	125
Assam	4	85
Arunachal	0	0
Pradesh		
Manipur	2	50
Meghalaya	0	0
Mizoram	0	0
Nagaland	0	0
Sikkim	1	25
Tripura	1	20
TOTAL	177	3,775

5.10.3 The inadequacy is borne out from the fact that these States together have a requirement of 9.8 lakh teachers while the institutional capacity to prepare teacher educators annually is only 3,775. Hence, in respect of these States, creating additional

capacity in existing teacher education institutions and establishing more such institutions would require a concomitant increase in the availability of teacher educators. Given a ratio of 1:20 for teacher educator to teacher (for the D. Ed programme), demand for around 9 lakh teachers converts into a requirement of 45,000 teacher educators or 22,500 teacher educators annually (since the programme is of 2 years). Thus, in these states there is an additional annual capacity requirement of around 19,000 teacher educators. While the gap filling cannot be filled-up in the short run, medium and long term strategies need to be adopted for increasing the overall availability of teacher educators. Some of the possible strategies are as under.

5.10.4 Creating capacity in Universities not running M. Ed programme: There are 80 Universities which do not run any M. Ed programme (18 Universities which have a Department of Education and 62 Universities which do not have a Department of Education). Efforts need to be made, in coordination with the UGC, to ensure that these Universities also offer the M. Ed. and MA (Education) courses. Out of the 18 Universities having a Department of Education, 3 are in West Bengal, 2 in Bihar and 1 each in Mizoram, Nagaland and Orissa. Similarly, in respect of 62 Universities which do not have a Department of Education, 4 each are in Bihar and Chhattisgarh, 3 each in Uttar Pradesh and Jharkhand, 2 each in J&K and West Bengal and one each in Orissa and Sikkim. This apart, starting the M. Ed and MA (Education) courses in Universities of neighbouring States can also increase the availability of teacher educators.

5.10.5 Increasing capacity in existing institutions: Most of the existing Departments of Education (in Universities) and Post Graduate Colleges offering M. Ed programme have an annual intake of 25 students only. These institutions could be requested to apply to the NCTE for increasing their annual intake in accordance with the NCTE Regulations.

5.10.6 Scholarship for M. Ed programme: Quality of teacher educators is as important for the teacher education institutions as quality of teachers is for the schooling system. In order to encourage prospective teacher educators to join the profession, it is proposed to institute a Scheme for awarding scholarship to meritorious students enrolled in M. Ed programme in these States. A beginning could be made in this direction from the academic year 2012-13 onwards by awarding a scholarship @ Rs 3000/- per month (for a period of 9 months of the M. Ed programme) to the top 20% of the students who are enrolled for the M. Ed programme in Department of Education of the Government Universities and in the Government Post Graduate Colleges of these States. An undertaking could be taken from these students for compulsorily offering to work in the teacher education institutions for a minimum of 2 years after completion of the M. Ed course. The short-listing of the meritorious students would be done by the respective Departments through a transparent process (by having an entrance exam for the applicants to the M. Ed course). This would involve an annual expenditure of around Rs 2 crore. This amount would increase over time as more institutions start offering the

M. Ed programme and existing institutions increase the annual intake of students to the programme in these States.

5.10.7 Diversifying eligibility criteria for teacher educators :

5.10.7.1 Under the NCTE Norms and Standards, a person with M. Ed qualification is eligible to be a teacher educator for the 2-year D. Ed programme for the foundation courses. This restrictive norm needs to be reviewed in light of (a) the skills of teacher educator required for the various modules of the D. Ed programme; and (b) international practice in respect of teacher education institutions. Teacher educators would fall in two broad categories. Those who teach core or foundational courses and those who teach on subject based methodologies. For subject based methodologies, M. Sc. Ed. or M.A. Ed. degrees, which combine liberal arts/science knowledge with modules on education, can be considered as alternative qualification for teacher educators. This would have the advantage of linking University Departments (other than Departments of Education) to the teacher education system. Such courses are common in countries such as USA, Canada and Australia for teacher educators. For core/foundational teacher educators, Post Graduate courses in Philosophy, Sociology, Psychology, etc. with modules on Education could be considered as alternative programmes for teacher educators. Further, Masters in any of these disciplines with M.Phil in Education could also be considered as a suitable qualification for a teacher educator.

5.10.7.2 The central idea behind the above proposal is to offer alternate paths for persons from various disciplines to become teacher educators (as is the practice in several countries) which would be consistent with the requirements of the D. Ed programme. It is proposed that a one-time seed money could be given as grant to select Universities for offering such courses.

5.10.8 Utilizing services of existing manpower: While the aforementioned strategies would lead to increased availability of teacher educators in the medium to long term, State Governments could consider relaxing the existing recruitment rules for filling up vacancies from amongst retired persons with requisite experience and qualification as also increasing the retirement age of teacher educators.

5.11 Public Private Partnership in Teacher Education

5.11.1 The total number of teacher education institutions across all levels and allied areas approved by NCTE as on March 2011 is 11,629 with the intake capacity of 11,06,820, out of which approximately 80 percent of the institutions are under private management. The engagement of the private players in the teacher education sectors has increased significantly during the last one decade though their presence is not new. During the eighties, commercialization of teacher education was in the center stage of policy discourse which ultimately culminated in the establishment of a regulatory body

to control uneven growth of teacher education institutions. However, the participation of private sectors increased gradually to prepare teachers with one year B.Ed framework and they are continuing to prepare teachers for the system. Their presence is market driven and urban dominated. Though the presence of private sector has helped in expanding capacity, it is characterized by imbalances leaving much gap for the regional disparities.

5.11.2 With this back drop and increasing demand for teachers, there is need for developing understanding on public-private partnership in teacher education, its strengths and weaknesses. Within a participatory framework, credible private players would need to synergize their efforts with the Central and State governments to introduce innovative programmes in teacher education. PPP can also be a powerful approach to fill some of the identified gaps to address both quantity and quality issues in teacher education. The approach within PPP must be in consonance with the overall priorities identified for Teacher Education but should not be seen as a panacea.

5.11.3 Overall Teacher Education Priorities must be kept in mind while formulating a PPP strategy for Teacher Education on the underlying principles of quality, expertise and capacity. The focus area for PPP in Teacher Education are;

- Training a large number of new teachers without compromising on quality
- Strengthening DIETs
- · Teacher capacity building
- ICT in teacher education

5.11.4 The key principles to make PPP work in Teacher Education are;

- Defining outcomes as clearly as possible and refining them regularly. It is not always possible to define outcomes clearly partly because of overall capacity issues and our understanding of learning itself.
- Development of a clear framework providing specific areas and broad modes of PPP engagement. This would allow different types of private players to engage in ways preferred by them, but in line with a larger coordinated plan which keeps national priorities in mind.
- Alternative Types of Private Players and Modes of Engagement should be listed out in the framework.

5.11.4 In particular, PPP could be explored in the following areas:

(i) Leadership and management capacity building in teacher education institutions: There is a compelling need to develop the managerial and

leadership capacities of middle-level educational functionaries, such as DIET Principals and Lecturers, BRC and CRC coordinator, etc. The experience of the private sector can be harnessed by the government both for training of these functionaries and also for developing internal training systems within the organizations such as DIETs, BRCs and CRCs.

- (ii) Academic enrichment: Private sector organizations with experience in the field of teacher education can mobilize resources to provide academic support to the government institutions like SCERT, DIETs, BRCs and CRCs. This can be in areas like pre service teacher education, in service teacher training and in classroom support.
- (iii) *E-Learning platforms:* Many large private sector organizations have developed e-learning platforms as an important method of training their employees. E-learning platforms provide the advantage of allowing each person to learn at their own pace and at the same time it also provides opportunity for large scale access to learning resources. There are a host of private sector organizations developing e-learning modules and e-learning management systems as well. The government can partner with organizations which have these capabilities to develop e-learning platforms for teachers, teacher educators and other education functionaries responsible for the teacher education institutions.
- (iv) *University linkages for professionalization of elementary education:* Private sector organizations can partner with existing universities and colleges to develop their departments of education. Creating endowments for research and subsidizing costs for education sector professionals is an important step that private sector organizations can take.
- (v) IT for management: Over the past decade, the usage of information technology for managing complex institutions has increased manifold. Many Indian IT organizations have expertise in developing software for this purpose as well. The expertise of these organizations can be drawn upon by the government for developing MIS systems which can provide valuable inputs for planning processes, improve quality of financial management in teacher education institutions, and facilitate faster internal communication. IT enabled systems for monitoring and evaluation of distance teacher education programmes for the untrained teachers would be particularly useful in evaluating the incremental skill improvement that such a programme aims to provide to the untrained teachers.

5.11.6 The Ministry can allocate space within the Sarva Shiksha Abhiyan and the Centrally Sponsored Scheme of Teacher Education for facilitating partnerships between the existing state government institutions and resource persons and institutions for long term institutional development of government institutions. This can be through partnerships in areas like pre service teacher education curriculum development, in

service teacher training, in classroom support to teachers and teacher accountability through School Management Committees.

5.12 Monitoring Mechanism

5.12.1 One of the problems pointed out in the NCERT Report was the weak monitoring of the outputs and outcomes of the teacher education institutions and the absence of a systemic and institutional mechanism to measure the effectiveness of these institutions. While the Guidelines of 1989 did prescribe a system of reporting of performance by the DIETs, CTEs and IASEs, somehow, over the years the system went into disuse. As a result, except for the periodical meetings held with the State Governments at the regional/national level, discussions with specific State Governments, and the annual meetings of the TEAB, there was no institutional mechanism to monitor the performance of these institutions at the level of the Central Government. Even a database of these institutions has not been prepared.

5.12.2 In view of the specific mandate of the RTE Act relating to teacher preparation and teacher training and the targets under the RMSA for teachers and teacher training at the secondary level, it becomes incumbent upon the Government to develop an institutional mechanism to monitor the effectiveness of the Scheme. During the XII Plan the strategy for developing a monitoring mechanism should consist of the following.

- (i) Develop a database of the teacher education institutions;
- (ii) Develop a computerized Management Information System (MIS) of these institutions along with performance indicators of physical and financial progress of the various outputs and outcomes of the Scheme;
- (iii) Develop a portal, linked to the MHRD portal, containing (i) and (ii) above;
- (iv) Develop a set of performance indicators of DIETs, CTEs and IASEs for assessing their quality and suggesting for their improvements. SCERT, Tamil Nadu has developed a set of performance indicators for DIET effectiveness. That may be utilized for developing national level set of performance indicators for DIETs, CTEs and IASEs.
- (v) Identify independent and well reputed institutions (Universities, etc) engaged in teacher education and entrust them with the responsibility to periodically evaluate the performance of these institutions (on sample basis), based on the performance indicators mentioned at (iv) above.
- (vi) Entrust SCERTs/SIEs with the responsibility of monitoring the performance of all the DIETs/DRCs and CTEs in the State.
- (vii) Establish a Technical Support Group under the Department of School Education and Literacy, which would provide support to the Ministry for collection, collation and analysis of information received through the MIS, assist in appraisal of Annual Work Plans of the State Governments, analyse the Reports received from the Monitoring agencies, etc.

5.12.3 For developing and putting in place a comprehensive monitoring mechanism, an additional expenditure, to the extent of 2% of the total expenditure approved would be earmarked as Monitoring, Management and Evaluation (MME) cost.

5.13 Centre-State fund sharing pattern

5.13.1 Under the existing Scheme, 100% Central assistance is given to the State Governments for various recurring and non-recurring components, subject to the financial limits and other conditions specified in the Scheme. A need is felt to ensure that State Governments also have a fair degree of financial stake in implementation of the Scheme. Even otherwise, the institutions for which financial assistance is provided (SCERTs, DIETs, CTEs and IASEs) are State-owned institutions. During the XII Plan, the Centre and States should share the funds in the ratio of 75:25 for all the components for which Central assistance is sanctioned to the States. In respect of 8 States of the North East Region (including Sikkim), the sharing ratio would be 90:10. Central assistance would be released to the State Governments only after the State Government commits to spend its mandatory share under the various components and has spent the State share against the previous releases of Central assistance.

Chapter VI : New Institutional Arrangements for qualitative Transformation of Teacher Education: A Futuristic Context for the 12th FYP

- 6.1 Integrating Elementary Teacher Education with Higher Education: Up-gradation of DIETs
- 6.1.1 Breaking the isolation of elementary Teacher Education from the mainstream Higher Education system, is a long pending obligation recommended by the Education Commission four decades ago. The Yashpal Committee in its Report of 2009 on Rejuvenation of Higher Education has also recommended integration of elementary teacher education with higher education. India is, perhaps, one of the few countries in the world where elementary school teachers do not require a university qualification. This would pave the way to establishing linkage with the higher education system in the long run. DIETs offer pre-service training in the form of a 2-year D.Ed course. It is proposed to upgrade DIETs in a phased manner to offer Bachelor in Elementary Education course or an integrated 4-year Bachelor of Elementary Education (B.El.Ed.) course. This would, however, entail upgrading salaries of the lecturers in the selected DIETs to UGC norms and ensuring that the faculty members possess the requisite qualifications. Such up-gradation would be initiated based on agreement and concrete requests from State Governments. Each upgraded DIET would be linked to a University Department in the neighbourhood and would receive special research grants to collaborate with higher education institutions and also with grassroots level organizations and elementary schools. The capacity of DIETs should also be enhanced appropriately in the long run.
- 6.1.2 In order to enable DIETs to undertake these programmes, the infrastructural facility would also be required to be upgraded. Additional non-recurring central assistance of may be provided to the DIETs to upgrade themselves. It is estimated that an amount of Rs 50 lakh per DIET would be required for upgrading its facilities.
- 6.2 New Institutional Arrangements: Apart from strengthening existing institutions by re-structuring them and revamping the content and pedagogy of teacher education programmes offered by them, there is need to establish new institutional arrangements that will ensure breaking the isolation of elementary school teacher development and practice and in breaking the insularity of secondary teacher development and practice. It is proposed that select universities and other institutes of higher education be identified to establish Schools of Education with the following vision and strategy:

A Schools of Education

• Identify 30 University Departments based in Central Universities, selected State Universities, Deemed Universities and other Centres of Higher Education,

- including the Regional Colleges of Education of the NCERT to establish Schools of Education.
- The current IASEs will be subsumed under the Schools of Education wherever the scheme is introduced. In other cases IASEs continue to operate but with redefined frameworks and responsibilities
- Schools of Education are envisaged to include several units/centres that would undertake in-depth work in specific areas that have remained neglected in areas of elementary and secondary teacher and school education.
- These include concerted research and material development in areas of Curriculum Studies, Pedagogic Studies, Assessment and Evaluation apart from the responsibility of educating teachers and teacher educators.
- Each of the Schools of Education set up in the 30 select institutions would have the following concrete programmes to offer via a set of separate but integrated centres.

Centres in Schools of Education: Activities and Focus Areas

1. Centre for Pre-service Teacher Education

- Undergraduate four year integrated programme of Elementary Teacher Education (B.El.Ed) as per the framework and norms notified by the NCTE (in-take will vary as per the needs of each state)
- Two year B.Ed programme of Secondary Teacher Education, including a 6-8 months placement in schools during internship
- Undergraduate four year integrated programme of Early Childhood Education
- Separate units for early childhood, elementary and secondary education

2. Curriculum Research Policy and Educational Development

- Undertake content analysis of existing school curricula across national and international experiences
- Develop school curricula across various disciplines of the sciences, social sciences, language and mathematics within the frame of local contexts and needs
- Develop simple conceptual materials for teacher-trainees and teacher practitioners and link with SCERT Language Units for translation
- Undertake research in critical areas such as: tracing the educational divide:
 caste, class, gender and identity; gender differentiation and educational
 aspirations; social and political participation of women; social exclusion
 and education across cultures: cross cultural studies; sociological and
 anthropological perspectives on learning and diversity; the political
 economy of educational provision; programme and policy analysis from a

human rights perspective; public and private schooling: comparative historical research on universalisation in different countries and the role of public education

3. Centre for Learning and Pedagogic Studies

- Undertake systematic and large scale research on children's thinking and learning processes; their conceptual understanding in specific areas of social sciences, sciences, languages and mathematics
- Undertake research and in-depth enquiry into teachers' conceptual levels in core disciplinary areas, their understanding of pedagogical content knowledge, assumptions about children, learning processes and strategies and notions of knowledge
- Undertake research on the construction and transmission of knowledge in different social systems; indigenous and unschooled knowledge; systems of apprenticeship; perspectives on curricula for out-of-school adolescents and adults
- Develop materials that enable an integrated understanding of pedagogy, knowledge domains and assessment

4. Centre for Assessment and Evaluation

- Undertake systematic and large scale research on children's cognitive attainment levels, scholastic achievement levels and social and interpersonal capacities in the context of school inputs, school ethos and culture
- Develop appropriate assessment models and methodologies towards achieving quality improvement
- Develop evaluation models for assessing programmatic inputs and their impact on issues of quality improvement

5. Centre for the Professional Development of Teacher Educators and Teacher Education Curricula

- Masters programme in Elementary Education with specialization in curriculum and pedagogic studies in mathematics education, social science and science education and assessment
- Masters programme in Secondary Education with specialization in curriculum and pedagogic studies in mathematics education, social science and science education and assessment

- Re-orientation of select secondary school teachers for elementary school teaching through an Advance Diploma in Elementary Education under a scheme of continuing education
- Redesign the DIET D.Ed course to bring it into the frame suggested in the NCFTE
- Focused programmes of professional development for the DIET and SCERT faculty across the state, including curriculum and pedagogic studies and disciplinary knowledge-base
- Periodic monthly academic enrichment activities for teacher educators including public lecture series, film and book discussion sessions and need based issues and concerns identified and initiated by teacher educators themselves
- Offer short-term orientation programmes/courses for teacher educators on teaching-learning skills, meta-learning strategies related to different curricular areas and child development; pedagogical aspects related to reading, writing, thinking and instructional design theories for curriculum developers.
- Institute teacher educator and teacher fellowships to enable young teachers and teacher educators to undertake research with provision of mentoring.

6. Centre for Teacher Resource and Academic Support

- Provision of teacher resources, children's literature, variety of school curricula and textbooks, multimedia materials, internet access for use across different centres of the School of Education
- Platform for hands-on experience with materials, children, teacher practitioners (in-service teacher education and continued professional support) and teacher-trainees
- Platform for teacher interaction, teacher exchange, seminars and study sessions, academic support face to face as well as through ICT
- Development of learning and teaching materials for use in schools and sharing across schools

Faculty Requirement for the Schools of Education

- Core faculty and administrative positions to be instituted under the XII Plan
- Visiting Faculty from across disciplines within and outside the University in which the SoE is based
- Fellowships for senior and junior faculty with varying disciplinary backgrounds
- Fellowships and Deputation Positions for Practitioners from schools, DIETs, SCERTs and other institutions of educational practice, including NGOs.

B Specialised Centres of Education

- Establish Centres of Excellence in Science and Mathematics Education in lead national level institutions e.g. IISc, Homi Babha Centre and TIFR. These institutions may be offered the facility and infrastructural provisions to offer sandwiched post-graduate courses of 3 years duration (BEd for 2 years or MEd for 3 years) towards developing a specialised cadre of senior secondary school teachers and teacher educators.
- Establish four Regional Centres of Educational Management in the IIMs at Ahmedabad, Calcutta and Bangalore and NUEPA, Delhi to provide a postgraduate degree in Education Management for heads of DIETs, SCERTs and other in-service practitioners. These courses can be designed to include credit courses across institutions with specialisations in curriculum and pedagogic studies.
- Establish **Language Units** within SCERTs to enable translation and development of curriculum materials

C Inter-University Centre

One **Inter-university Centre** at the National level which can help coordinate between the 30 University-based Schools of Education in terms of academic content: redesigning of teacher education curricula for secondary and elementary teacher education, developing curriculum materials (offline and online), including commissioning of materials in regional languages through the specific state-based institutions such as SCERTs. The mandate of this Centre will be to provide a separate yet integrated focus on elementary and secondary levels of school education. The Inter-University Centre shall function under the UGC. Table 4 presents in tabular form the variety of courses that may be offered for pre-service and continuous development of teachers and teacher educators.

Financial Proposal

The expected outlay for the above proposal has been worked out for each year of the XII FYP, including a break-up of recurring and non-recurring expenses. These have been separately given in **Annexure I**.

	Table-3 Proposed programmes for Teacher Education											
S.No.	Degrees/Diplomas	Abbreviation	Awarding Institution	Туре	Focus	Duration (years)	Minimum Entry					
							Qualification					
1	Diploma in Early Childhood Education	D. Ec.Ed.	DIET/ SCERT	Pre-service	ECE centres	2	10+2					
2	Diploma in Elementary Education	DEl.Ed.	DIET	1 Te-service	Elementary schools	2	10+2					

3	Advanced Diploma in Education Management	Ad.D. Ed. Mang.	IGNOU	In-service	Leadership	1	In-service Teachers		
4	Advanced Diploma in Elementary Education	Ad. D. El.Ed.		Continuing Education	Primary & Upper Primary schools in states with large teacher deficit	1	In-service Secondary Teachers in select States		
5	Bachelors in Early Childhood Education	B.Ec.Ed				ECE centres	4	10+2	
6	Bachelors in Elementary Education	B.El.Ed				Pre-service	Primary & Upper Primary schools	4	10+2
7	Bachelors in Secondary Education	B.Sec.Ed	Schools of Education & Centres of Excellence in		Secondary & Senior Secondary schools	2	BA, BSc		
8	Masters in Early Childhood Education	M.Ec.Ed	Science & Mathematics education for Masters		ECE Teacher Education & ECE centres	2	B.Ec.Ed., BA, BSc with Education elective		
9	Masters in Elementary Education	M.El.Ed	Maths Education	Maths			Elementary Teacher Education, Primary & Upper Primary Schools	2	B.El.Ed., MA, MSc with Education elective
10	Masters in Secondary Education	M.Sec.Ed		Pre-service / Continuing Education	Secondary Teacher Education, Secondary & Senior Secondary secondary	2	B.Sec.Ed., MA, MSc with Education elective		
11	Masters in Educational Management	MBA (Ed)	Schools of Management in collaboratio n with SoEs		Leadership and Management of Schools with specialisation in ECCE, Elementary & Secondary schools	1	B.Ec.Ed, B.El.Ed, B.Sec.Ed & legacy B.Ed.		

Estimate for Teacher Education Scheme during XII Plan Period

Annexure

Amount Rs. in Crore

			XII Plan								
S. No.	Head/ Item		2013-14	2014-15	2015-16	2016-17	XII Plan Total	Recurring	Non- recurring		
1	2	3	4	5	6	7	8	9	10		
ı	SCERTs / SIEs:										
(a)	Continuation/ Modification of existing ones						0				
	(A) Strengthening physical infrastructure Non-recurring)						0				
	(31 SCERTs/SIEs x Rs. 2 Crore per SCERT/SIE)	30	16	16			62	0	62		
							0				
	(B) Establishment of Special Cells (non-recurring)						0				
	(31 SCERTs/SIEs x Rs. 50.00 lakh per SCERT/SIE)	7.25	7.25	0	0	0	14.5	0	14.5		
							0				
	(C) Specific Projects for academic activities (recurring)						0				
	(31 SCERTs/SIE x Rs. 20 lakh per year)	6.2	6.2	6.2	6.2	6.2	31	31	0		
	(D) Faculty Development (recurring)						0				
	(31 SCERTs x Rs. 10 lakh per						15.5				
	SCERT per year)	3.1	3.1	3.1	3.1	3.1		15.5	0		
	(E) Recurring assistance for salary						139.5				
	(Rs 1 cr. per SCERT/SIE	15.5	31	31	31	31		139.5	0		
	Total: (A) to (D):	62.05	63.55	56.3	40.3	40.3	262.5	186	76.5		

(b)	Training in DIETs for Educational Administrators, including Head Teachers						0		
	(4 Cycles- per DIET per yearx Rs. 40,000 Per Cycle).	10.12	10.12	10.12	10.12	10.12	50.6	50.6	0
	Duration of programme: 5 days.						0		
	No. of participants : 40 X 4 Cycles						0		
	Cost per participants : Rs. 200 per day						0		
							0		
(c)	orientation/inducting trg. of teacher educators	0.27	0.27	0.27	0.27	0.26	1.34	1.34	0
	(14 days x Rs 200 per participant per day)						0		
	Total (a) +(b) + (c)	72.44	73.94	66.69	50.69	50.68	314.44	237.94	76.5
II	Colleges of Teacher Education (CTEs)						0		
	(A) Existing CTEs: Recurring expenditure on salary, programmes & activities, contingency and vehicle hiring.						0		
	(106 CTEs x Rs. 50 lakh per CTE per year)	53	53	53	53	53	265	265	0
							0		
	(B) Non-Recurring Expenditure on Civil Works & Equipment for existing CTEs (106XRs. 1 crore per CTE for strengtheing infrastructure including equipment, library and		00	00			106		100
	laboratries) (C) Establishment of 30 new CTEs:	50	28	28	0	0	0	0	106
	(30 CTEs: Rs. 1.5 Cr. for Infrastructure and equipment (non-recurring)						35		
	<u>-</u>	20	10	5				0	35
	recurring for 30 CTEs @ Rs 50 lakh per CTE	3	10	15	15	15	58	43.5	14.5

	Total: (A) + (B) + (C)	126	101	101	68	68	464	308.5	155.5
III	Institutes of Advanced Study in Education (IASEs)						0		
	(A) Recurring expenditure on salary, programmes and activities.						0		
	(32 IASEs x Rs. 50 lakh per IASE per year)	16	16	16	16	16	80	80	0
							0		
	(B) Non-Recurring expenditure on Civil Works & Equipments, repairs						0		
	(32 IASEs x Rs. 1.25 Crore per IASE as lump sum per plan period).	20	14	14			48	0	48
	(C) Establishment of 50 new IASEs						0		
	(50 IASEs: Rs. 1.5 Cr. for Infrastructure and equipment (non-						75		
	recurring)	25	25	25				0	75
	recurring for 50 IASEs towards salary and programmes @ Rs 50 lakh	0	8	16	25	25	74	74	0
	Total: (A)+(B)+ (C)	61	63	71	41	41	277	154	123
							0		
IV	Continuation of Support to DIETs:						0		
							0		
(a)	Strengthening and expansion of the DIET scheme.						0		
							0		
	(A) Recurring expenditure on salary, programmes & contingency (average expenditure -)						0		
	(571 DIETs x Rs. 120 lakh per DIET per year)	685	685	685	685	685	3425	3425	0
	Details:						0		
	Salary component : Rs. 70.00 lakhs per DIET						0		
	Programme component : Rs. 30.00						0		

	lakhs per DIET								
	Contingency component: Rs. 15.00						0		
	lakhs per DIET								
	Faculty development : Rs. 5 lakh per DIET						0		
	Total: Rs. 120 lakh per DIET						0		
	(B) Non-Recurring						0		
	(I) For new DIETs						0		
	(55 DIETs x Rs. 3.5 Crore per DIET)	70	70	30	22.5		192.5	0	192.5
	(II) Additional Central assistance for strengthening of infrastructure/renovation of buildings including equipment, library and laboratories of existing DIETs.						0		
	(571 DIETs x Rs. 1 Crore)	300	100	100	71		571	0	571
	(C) Recurring central assistance to new DIETs	20	40	64.9	64.9	64.9	254.7	254.7	0
	Total: (A)+(B)	1075	895	879.9	843.4	749.9	4443.2	3679.7	763.5
				0.0.0			0		
٧	Establishment of BITEs						0		
	(A) Establishment of 200 BITEs in high deficit states						0		
	(i) Non-recurring expenditure @Rs 2.75 crore per BITE	100	200	100	150		550	0	550
	(ii) Recurring expenditure	0	35	45.5	70	70	220.5	220.5	0
	(B) Establishment of BITEs in SC/ST and minority concentration areas						0		
	(i) Recurring expenditure						0		
	(196 BITEs x Rs. 35 lakh)	0	42	56	68.6	68.6	235.2	235.2	0
	(ii) Non-Recurring expenditure						0		
	(196 BITEsX Rs 2.75 crore per BITE)	100	200	100	139		539	0	539
	Total: (A)+(B)	200	477	301.5	427.6	138.6	1544.7	455.7	1089
							0		
VI	Professional development of						0		
٧.	Teacher Educators								

	duration - 21 days								
	(50 institutes x 2 refresher courses per institution per year x Rs. 2 lakhs per course)	2	2	2	2	2	10	10	0
	Total	2	2	2	2	2	10	10	0
VII	Technology in Teacher Education						0		
(a)	Non-Recurring Expenditure:						0		
(α)									
	(A) Deployment in DIETs.	10	10	11.3	5	0	36.3	0	36.3
							0		
							0		
	(B) Costs for developing content.	3	3	2	1	0	9	0	9
	(100 teacher modules @ Rs. 1 Min per module)						0		
							0		
	(C) Costs for Hub(2) – for satellite receiving and sending.	40	50	60	50	0	200	0	200
	(D) One time teacher educator training/orientation @ Rs 1.5 lakh per			_			20		
	DIET.	6	6	6 79.3	58	0	205.2	0	20
	Total: (A)+(B)+(C)+(D)	59	69	79.3	58	0	265.3 0	U	265.3
(b)	Recurring Expenditure:						0		
` '	(E) Cost of additional support including maintenance and recurring costs@ Rs. 2 lakh per annum per DIET	14.42	16.4	16.4	16.4	16.4	80.02	80.02	0
	Total: (a)+(b)	73.42	85.4	95.7	74.4	16.4	345.32	80.02	265.3
							0		
VIII	Integrating Elementary Teacher Education with Higher Education						0		
	Upgradation of DIETs (non-recurring) @ Rs 50 lakh per DIET	5	10	10	0	0	25	0	25
	Total:	5	10	10	0	0	25	0	25
IX	Preparation of Teacher Eduactors						0		

	Scholarship for M. Ed programme	2.25	2.25	2.5	2.5	2.75	12.25	12.25	0
X	30 Schools of Education						0		
	(A) Non-recurring @ Rs 2.5 crore per school	30	20	25	0	0	75	0	75
	(B) Recurring expenditure @ Rs 2 crore per school	20	40	60	60	60	240	240	0
XI	Specialised Centres of Excellence (Eight Centres)						0		
	(A) Non-recurring @ Rs 2 crore per centre	4	2	2	0	0	8	0	8
	(B) Recurring expenditure @ Rs 1 crore per school		4	8	8	8	28	28	0
	GRAND TOTAL	1671.11	1775.59	1625.29	1577.59	1137.33	7786.91	5206.11	2580.8