

# **REVISED CENTRALLY SPONSORED SCHEME OF “VOCATIONALISATION OF HIGHER SECONDARY EDUCATION”**

## **1 INTRODUCTION**

### **1.1 Background**

**1.1.1** The national policy planners have considered higher secondary stage of school education as crucial since it is at this stage that necessary skills and competencies are acquired which enable the students to enter the world of work or to go for higher education.

**1.1.2** Vocational education has been accorded high priority in the National Policy on Education, 1986. The NPE, 1986 inter alia states “The introduction of systematic, well-planned and rigorously implemented programme of vocational education is crucial in the proposed educational re-organization.... Vocational education will be a distinct stream intended to prepare students for identified vocations spanning several areas of activity”. The NPE, 1986 set the target, to cover 10% higher secondary students under vocational courses by 1990 and 25% by 1995. The POA, 1992 reset the targets of diversification of students in vocational streams at + 2 level to 10% by 1995 and 25% by 2000.

**1.1.3** Consequently, a Centrally Sponsored Scheme (CSS) of Vocationalisation of Secondary Education was launched in 1988, which was implemented by the States/UTs for the formal sector and by the Non-Government Organisations (NGOs)/Voluntary Organisations (VOs) in the non-formal sector. The objectives of the scheme were: (i) to provide diversification of educational opportunities so as to enhance individual employability; (ii) to reduce the mismatch between demand and supply of skilled human resource, and (iii) to provide an alternative for those pursuing higher education. Under the scheme vocational courses are provided in general schools with 2 years duration after secondary stage. As regards funding, 100% financial assistance had been given by the Central Government for 11 components, fund was shared 50:50 between the Centre and the State for 5 components and 100% funding is provided by the respective State Government/UT in case of 2 components. Generally Rs. 1 lakh was provided for

each vocational course for construction of laboratory and purchase of equipment. The scheme provided for recruitment of 2 full-time teachers and 1 part-time teacher per course. The vocational courses were of fixed 2 years' duration, although the scheme included a provision of variable duration, ranging from 1 to 3 years.

## **1.2 Present Status and Need for Revision**

**1.2.1** The scheme of Vocationalisation of Secondary Education was launched in 1988. Under the scheme since its inception, 10,000 schools have been covered with an intake capacity of about 10 lakh students. As per the evaluation study carried out in 1995-96, about 4.8% students were diverted to vocational stream. 28% of Vocational pass outs were employed/self-employed and 38.3% vocational pass outs were pursuing higher studies.

**1.2.2** The success of the scheme has not been uniform all over the country. Some States/UTs are much ahead in implementing the scheme effectively, while others are still struggling to implement the same. The evaluation studies in various States/UTs led to the identification of bottlenecks in the implementation of the scheme. Some of these include lack or absence of regular teachers and their training/retraining, insufficient financial allocation (which was only Rs. 2 lakh/trade), high financial implication on the part of States, non-flexible duration and delivery of courses which at times were not need based, no change in recruitment rules, poor linkage with industry, poor vertical mobility, absence of separate management structures, absence of long-term commitment from the Central Government and inadequate monitoring.

**1.2.3** The scheme is overdue for revision for several reasons including the dire need at present for high skilled human resource to sustain the high growth rate of Indian economy and increased possibilities of international demand of skilled manpower, changes in technologies and financial markets, the growing international competition and increasing demand from various segments of population for job-oriented education.

**1.2.4** If India wants to have a competitive advantage, it needs to restructure its Vocational Education and Training (VET) system. Consequently, based on the current and futuristic requirements and keeping in mind the experiences gained and lessons learnt from the implementation of the previous scheme of Vocationalisation of Secondary Education, a revised scheme is now proposed. The revised scheme echoes the ideology inherent in the Framework for Vocational Education and Training in India developed by the MHRD, 2007 (para 1.6.0). The framework proposes to integrate the general academic education, vocational education, vocational training and higher education as a comprehensive system under the Indian Qualifications Framework (IQF) (para 1.7.0). The vocational education at the higher secondary stage is a part of this proposed integrated national qualification system. Thus, vocational graduates will have opportunities not only to enter the world of work through wage or self-employment, but also can have lateral and vertical mobility in the educational system.

### **1.3 Demand Supply Gaps**

**1.3.1** High quality skills training requires adequate infrastructure, tools, equipment, regular supply of training materials, expert practitioners, and practice by the learners on-the-job or off-the-job. At present, the quality of training is low due to undue emphasis on theory and certification rather than acquisition of skills and proficiency testing. The certificate does not indicate the competencies acquired by the learner.

**1.3.2** Lack of inputs from prospective employers and industry for curriculum design and training delivery are partly responsible for the mismatch between the demand and supply of skills. Another reason is the lack of rigorous entrepreneurial skill development programme for vocational students as a result very few of them opt for self-employment. The curriculum for the vocational course will be prepared jointly by the representatives of Industry/Industry Associations and educators. It will be revised and updated at least every 2-3

years. Besides technical skills, greater emphasis will be given on development of employability skills, which would include (i) Basic communication skills, (ii) Basic IT skills, (iii) Customer care services, (iv) Etiquettes and Manners, (v) Art of Public speaking, (vi) Front Office Management, (vii) Telephone communication skills, (viii) Interview skills, (ix) Interpersonal or social skills, (x) Team building skills, (xi) Employment seeking skills.

#### **1.4 Need for revamping Vocational Education Programme**

**1.4.1** The children completing the primary/elementary schooling need to be imparted both generic and specific skills that will help them live a quality life. This is where the relevance of VET comes into picture. Through properly planned and effectively implemented VET programme, there is a possibility to prepare employable persons for sustained employment.

**1.4.2** The following statistics give an overview of the present status of Secondary and Higher Secondary Schools and enrolment of students in the country:

1.	No. of Secondary Schools*	1,23,265
2.	No. of Higher Secondary Schools*	60,383
3.	No. of Students at Secondary level (Classes IX-X)*	2.89 crore
4.	No. of Students at Higher Secondary level (Classes XI-XII)*	1.66crore
5.	Projected Population of 14-15 age group**	4.84 crore
6.	Projected Population of 16-17 age group**	4.86 crore

Source: \*Selected Educational Statistics (2008-09)—provisional data,

\*\*Census (2001)

**1.4.3** There is a significant drop-out of students after completion of Class 10 and they do not join class 11. These children and a certain percentage of children enrolling in Class 11 who have aptitude for vocational courses, but are compelled to pursue academic courses in the absence of any opportunity, constitute the target group under the scheme of vocational education at secondary level. There is evidence that countries with a strong VET system have increased their marginal productivity and lowered the unemployment rates.

**1.4.4** The relevance of vocational education has increased in the fast growing Indian economy, especially in the light of the Government's thrust on Universalisation of Secondary Education, skill development and social justice through inclusive education and training.

## **1.5 National Vocational Education Qualifications Framework (NVEQF)**

### **1.5.1 Key features:**

- (i) Provides closer integration of learning and work.
- (ii) Integrates general academic education, vocational education, vocational training and higher education into a single system of 14 qualifications.
- (iii) Encourages continuous up-gradation of knowledge and skills.
- (iv) Supports flexible educational pathways between sectors and across qualifications.
- (v) Encourages parity of esteem between academic and vocational qualifications.
- (vi) Promotes greater and active involvement of social partners and industry.
- (vii) Supports inclusive growth by providing equal access of VET to all.

### 1.5.2 NVEQF : A Schema

General Education Qualification at +2 level		National Vocational Education Qualification at +2 level	ITI Qualifications	Polytechnics Qualifications	Higher Education Qualifications
Certificate of Senior Secondary Education	Class XII	NCC II	Trade Certificate II	Advanced Diploma	Doctorate M Phil. Masters Bachelor
	Class XI	NCC I	Trade Certificate I	Diploma Certificate I**	
Certificate of Secondary Education	Class X Class IX		Bridge Course Certificate in Craftsman Training ***		

\* First year of polytechnic diploma;

\*\* Second year of polytechnic diploma

\*\*\* Where entry is after class 8.

National Competence Certificate 1 & II

## **1.6 Aims and Objectives**

**1.6.1** In concurrence with recommendations of various Education Commissions, Committees, National Policy on Education (1986), Programme Of Action (1992) and the requirements of the prevailing national and international scenario, the major aim of the scheme is to prepare educated, employable and competitive human resource for various sectors of the economy and the global market.

**1.6.2** Accordingly, the specific objectives of the scheme are to enhance the employability of youth through competency based modular vocational courses; to maintain their competitiveness through provisions of multi-entry multi-exit learning opportunities and vertical mobility/ interchangeability in qualifications; to fill the gap between educated and employable; and to decrease the pressure on academic higher education.

## **1.7 Scope**

**1.7.1** Vocational Education would be a distinct stream intended to prepare skilled persons for identified vocations/trades as per demand of emerging economy, industry/employer in several areas, which would include both the organized and un-organized sectors. Besides, vocational electives in the form of modules would also be available for the academic stream students in addition to their academic subjects, who would be awarded a certificate of attainment and credits on completion of a module.

**1.7.2** Demand driven modular vocational courses would be identified and developed in collaboration with Industry/employers. These courses would be offered through Higher Secondary Government, Government -Aided and Private Schools in conformity with the NVEQF system.

## **1.8 Nature of the Scheme**

**1.8.1** It will be a Centrally Sponsored Scheme (CSS) under which financial assistance will be given to the State Governments/UT administrations and NGOs/VOs for the remaining period of XI Plan for approved purposes.

**1.8.2** The scheme would involve establishment of new vocational schools, strengthening existing vocational schools, capacity building of vocational education teachers, development of competency based curriculum and teaching material and development of an MIS for monitoring and evaluation.

## **1.9 Targets of 11<sup>th</sup> Plan**

**1.9.1** During the 11<sup>th</sup> Plan it is proposed to start new vocational schools and strengthen existing vocational schools in government sector. Private schools will be assisted under Public Private Partnership (PPP) mode. NGOs of repute will also be assisted during the period. Competency based curriculum and learning material would be developed. In service training would be provided to vocational teachers and induction training to fresh vocational teachers. A Vocational Education Cell would be established under Central Board of Secondary Education (CBSE) as a precursor to the Central Board of Vocational Education (CBVE).



## **1.10 Implementing Agencies**

**1.10.1** The Scheme will be primarily implemented by the State Govts. Besides the vocational schools, other relevant Institutions involved in skill development, i.e. Industrial Training Institutes, Polytechnics, Skill Development Centers, etc. would also be encouraged to participate in the scheme in conformity with the norms and standards.

## **2 IMPLEMENTATION MECHANISM**

### **2.1 Assessment of Human Resource Needs**

**2.1.1** Assessment of human resource needs is the first step towards planning for Human Resource Development locally or globally. It helps in identifying the trend of emerging vocations, levels of competency required, duration for which the demand is likely to subsist, quantum of requirement and the extent to which education and training facilities are needed. It is a sophisticated exercise and requires a great deal of expertise. Therefore, in order to have realistic national estimates of human resource needs on a long term and continued basis, this task would be assigned to bodies like Industry Skills Councils/ Skill Development Councils/Sector Skills Councils in different trades/vocational clusters, e.g., Automobile, Health Care Services, Manufacturing, Health, Banking, Tourism, Electronics, Organized Retail Marketing, Insurance, Food Processing, Information Technology, Textile, Entertainment, Construction, etc. In addition, States in consultation with the local industry etc. will identify the human resource needs.

## **2.2 Selection of Schools**

**2.2.1** The proximity between the schools and industry/employer would be a major consideration in the selection of the vocational schools, wherein every school will be required to have linkage with some related Enterprise/ Industry/ Farm/ Organization, etc., for specialized quality assurance and other relevant aspects. The schools should also foster linkages with other trade establishments, industries and business set ups with greater responsibilities to be taken up by FICCI, CII and ASSOCHAM and other identified apex bodies at the Central and State levels. In addition, the task would also need to be accomplished at local level by the State Directorate of Vocational Education, District Vocational Education Offices, when established and the Vocational Schools/Institutes/Centres themselves. They will also evolve suitable mechanisms to involve other relevant existing bodies at their level as well as to rope in the community and the industry for the task.

**2.2.2** The proposal is to start new vocational schools in government sector and assist schools under Public Private Participation (PPP) mode during the 11<sup>th</sup> Plan. Existing vocational schools will also be strengthened during 11<sup>th</sup> Plan. In the vocational schools under PPP mode, 25% seats will be filled by children of socio-economically weaker sections (SC/ ST/ OBC/ Minorities/ children with special needs/ persons Below Poverty Line; out of which 50% would be girls), who will be sponsored through Government grant under this scheme. Expenditure on the fee of these students will be reimbursed to the private schools by the Government of India. While selecting schools, care will be taken that equal opportunities of access are created for girls.

**2.2.3** Schools offering vocational courses will run in two shifts – one shift for the formal mode and another for the non-formal mode. The second shift will run on the basis of self-finance.

**2.2.4.** Vocational modules would also be offered to the academic stream students as vocational electives in the formal or non-formal mode. The schools

offering vocational courses will also serve as accredited vocational education and training centres of National Institute of Open Schooling (NIOS).

## **2.3 Certification**

**2.3.1.** In the formal mode, National Competence Certificate 1 (NCC 1) and NCC 2 will be awarded as qualification in Class XI and XII, respectively. Besides these, certificates of attainment will be issued to those students taking selected modules of shorter duration, offered through a system of multi-entry and multi-exit with credit accumulation facility. Certificate of attainment will also be issued to those regular students who will enroll in Class XI/ XII taking all the requisite modules but completing only one or a few of them. A Credit Accumulation and Transfer (CAT) system will enable learners to accumulate certain number of credits of learning from various modules with a view to convert the accumulated credits into a recognized qualification. In the non-formal mode, modular courses of short duration will be made available, which will also lead to certificates of attainment/competency certificates with provision of credit accumulation and multi entry-exit flexibility.

## **2.4 Selection of Courses**

**2.4.1** Every selected school would offer need based modular vocational courses in identified vocations in such a manner that would provide desirable flexibility of choice to students. The selection of courses should be based on assessment of skill needs, conducted nationally and locally; availability of required resources e.g. industry/business set-up for linkages, teachers/trainers, necessary raw material, electricity, water supply, and the prevailing and emerging employment opportunities. The modular courses will be provided in schools after approval of the proposal by the Committee in MHRD and assistance will be provided as per the financial norms laid down.

**2.4.2** The existing and the new vocational schools will offer on the average 2 vocational courses in the formal mode and modules related to these vocational

courses would also be offered separately through the non-formal mode. One batch of a vocational course will comprise 25 students who will be split into two groups for practical work.

## **2.5 Curriculum**

**2.5.1** The vocational courses would be competency based and modular with specified credits and built-in provision for multi-entry, multi-exit and vertical mobility. The curriculum would be need-based and relevant so as to lead to gainful self or wage employment. The modules will include vocational theory and practice for which the weightage may vary from vocation to vocation and module to module, but competency development will be the main focus. Modules will also be available for inculcation of soft/generic skills, language, foundation subjects, personality development, etc. leading to better employability of the students. A component of on-the-job training/internship would be an integral part of the curriculum. A package for each vocational course including various important components will be offered. However, the students will have a choice to deviate from the package and take modules of their choice.

**2.5.2** Curriculum development will be undertaken by the PSS Central Institute of Vocational Education with greater inputs from industry through the Sector Skills Councils to allow conceptualization and localization of content. For assurance of quality and relevance, the vocational courses, modules and curricula need to be reviewed and revised every three years or earlier as per need. PSSCIVE will develop exemplar curricula for adoption or adaptation by the Central/State Boards. Each curriculum would, however, have to meet national standards for competencies and other applicable norms.

## **2.6 Instructional and Learning Materials**

**2.6.1** Competency based instructional and learning materials would be made available for the identified vocational courses to the learners, teachers and trainers. Teacher and trainer guides, practical manuals/workbooks, charts, multi-

media packages would be developed on a large scale and would be made available to all the States/UTs for translation, contextualisation and implementation. PSSCIVE will continue to provide support in the development of exemplar instructional and learning materials. Worksheets Handouts, Kits, etc. would form an integral part of the package to keep the learner active during the learning process. The procedure as detailed out for development of curricula will also apply to development or revision of such materials.

## **2.7 E-Learning**

**2.7.1** Electronic learning (E-learning) is now recognized as a human resource development modality, especially for promoting learner-centered approach. Hence, efforts would be made to make available on-line learning materials for different modules of the vocational courses. Appropriate budgetary provision for development of e-material will be made in the scheme. The PSSCIVE, with the help of other Institutes will develop or outsource the development of e-materials and would make them available to the States/UTs for application.

## **2.8 Equipment and Raw Materials**

**2.8.1** The adequate requirement in terms of tools, equipment and machinery for the development of soft and basic technical skills would be provided to the schools. The list of the tools and equipment would be mentioned in the curriculum, which would form the basis for purchase of relevant machinery and equipment for the vocational course. In addition, the requirements for modern tools and equipment could also be assessed taking the help of employers, relevant organizations, and professionals in the field. Linkages will have to be developed with industry and other organizations for specialized technical training using their equipment and expertise. Raw materials and consumable items like glassware, plastic-ware, chemicals, etc. would also be provided for each course, the grant for which would vary from course to course. Maintenance of tools and equipment will also be funded through the scheme.

## **2.9 Faculty and Staff**

**2.9.1** The services of Vocational Coordinator/Principal would be on a regular basis. In addition to the administrative responsibilities, the Vocational Coordinator will also partly contribute to teach/ train the students. In case of the vocational course, the classes of which the Vocational Coordinator would be taking, only one such teacher would be appointed with more support from the guest faculty, as the Coordinator due to administrative work would be able to only partly support the teaching. The specialized teachers/trainers for classroom instructions/ workshop practice shall be hired on payment of per hour basis as Guest Faculty.

**2.9.2** Two teachers per vocational course will be appointed on full-time contractual basis for 3 years in the first instance. Rest of the teachers/trainers will be drawn on per hour payment basis as guest faculty. Other support staff will be hired on term appointment (contractual basis).

## **2.10 Selection of Teachers/Trainers**

**2.10.1** Vocational courses will be conducted with the help of full-time contractual teachers/trainers as well as the guest faculty. The qualification for the teachers/trainers will vary with reference to each cluster of vocational courses. Accordingly, the PSSCIVE will work out the details of qualification for appointing teachers/trainers and would circulate the guidelines for the selection and recruitment of teachers/trainers to all the States/UTs. Preference will be given to those people who have experience in the industry. The States will have to ensure that teachers and trainers are selected well in advance before the commencement of the programme. An induction training of 30 days duration will be organized by the respective States for all the appointed vocational teachers. The teachers/trainers for teacher's training and the guest faculty for vocational courses can be obtained from amongst Master Crafts-persons/professionals in the concerned vocation even though they may not have formal qualification (degree/diploma or a teacher training certificate). The vocational

coordinator/principal in consultation with the school management committee, regular and contractual teachers, and industry to which the school is linked would invite the guest faculty within the specified norms and guidelines.

## **2.11 Training of Teachers/Trainers/Key Functionaries**

**2.11.1** It is the teacher who interprets and implements the educational policy in actual class room situation and as such is the most crucial person in the system. A separate paper on VE would be included in B.Ed. & M.Ed. programmes for teacher preparation. Further, B.Ed. (Voc.) programmes may be expanded and strengthened. Students of B.Ed. and M.Ed. programme will be given hands-on practice through internship programme in work place/industry. Regular in-service teacher/ trainers training programmes of 7 to 10 days on pedagogy, subject content and other related aspects of VE should be organized for all teachers every year. Pre-service teacher/ trainer programme would be developed by PSSCIVE in consultation with National Council for Teacher Education (NCTE) and would be offered in institutions like PSSCIVE, Bhopal, Regional Institute of Education of NCERT, Teacher Training Colleges, National Institutes of Technical Teacher Training and Research, Universities, etc. for meeting the requirement of vocational teachers. A concise training package would be developed by PSSCIVE/NCTE in teaching techniques, competency based training and assessment and communication skills for the full-time and contractual teachers from various fields. The PSSCIVE, Bhopal will act as the principal coordinating agency for organizing teachers training programmes.

**2.11.2** Orientation/sensitization programme for State officials and State Boards would be organized by the PSSCIVE every year.

## **2.12 Industries/User Organizations' Involvement**

**2.12.1** The success of vocational stream is dependent upon industries/user organizations' involvement in various activities e.g. need assessment, competency standardization, quality assurance, on job training (OJT)/internship,

development of job profiles and curriculum, assessment and possibly joint certification, etc. As mentioned earlier, each school will have to have linkage with an industry/business establishment. Specialized practical work and training would be arranged in commercial and industrial establishments, hospitals, farms, etc. depending on the vocation and the nature and level of practical training required for the course. Training arrangements should also be made in the unorganized sector on half or full day basis. Structural flexibilities in the timetable would be incorporated to arrange practical training according to the convenience of the trainer/industry. Guidelines for practical training in industry will be prepared by the PSSCIVE, Bhopal. For the purpose, MOUs shall be signed between the school/institution and industries/user organizations. The Vocational Co-ordinator/ Principal of school offering vocational courses would approach industry and seek their cooperation for various possible aspects including practical training to vocational students. The SDVE would ensure that necessary instructions are issued to appropriate state authorities and concerned officers to ensure full cooperation of industries for imparting practical training to vocational students.

### **2.13 Assessment and Certification**

**2.13.1** The certificates for vocational course as well as modules will be awarded by the concerned State Boards or the Central Boards. Possibility of joint certification with a reputed industry or international certification body should also be explored and implemented.

**2.13.2** Both formative and summative assessments are critical elements that need careful consideration in the development and design of any learning experience by the teacher or trainer. In the context of practical skills, the assessment must measure the performance of the skill with respect to predetermined standards. A learner must demonstrate competence by successfully performing the practical skill.

**2.13.3** Formative assessment relates to the practice or rehearsal of the skill. Clearly this requires time for the learner to master more complex skills, especially



if a range of performance criteria is a feature of the assessment process. Assessment of competence should therefore be conducted after a period of rehearsal. The summative assessment relies on the learner's ability to provide evidence of his or her ability to perform the skills. This assessment may have certain performance criteria attributed to it and therefore, speed; degree of accuracy, application under certain circumstances, etc. should be measured. Feedback from the supervisor or workplace trainer or assessor at the training site is a useful measure in gathering evidence. The school should maintain student portfolio and the same should be annexed with the evaluation sheet/certificate awarded by the Board.

**2.13.4** Since preparing employable youth is the main objective of vocational education, it is important that standards are clearly laid down for the competencies required and that there should be an understanding regarding equivalence of certificates issued by various State Governments, organizations within the Government by different Departments, etc. A suitable mechanism for the purpose would be developed by the PSSCIVE including that of accreditation and recognition of vocational courses. Getting international bench marking and recognition of the vocational competencies and qualification is also a job assigned to PSSCIVE.

**2.13.5** Internal assessment of the performance of students will have to be done by the school in a continuous comprehensive manner. The Central /State Boards would conduct external competency based assessment in collaboration with the concerned industry/enterprise/organization. Guidelines for competency-based assessment of students will be provided by PSSCIVE, Bhopal, to be adapted by the concerned State Boards.

## **2.14 Ensuring Girls' Participation**

**2.14.1** The National Policy of Education (1986) has categorically recognized education as an agent of social change in favour of girls and has particularly emphasized facilitating girls' participation in vocational and technical education.

Further, women empowerment is high on national agenda. Echoing the same ideology, this policy also places equal and non-stereotyped participation of girls in vocational education on high priority. This should be the guiding principle for taking various steps for implementation and monitoring of the scheme, be it expansion or strengthening of the schools, enrolment, placement or such others. Though priority would be accorded to co-educational schools/institutes, wherever the society is not yet ready for it, all girls' schools would be included. The selection of courses in these schools should not be gender guided. Similarly, choice of courses by the girls would be promoted in such a manner that gender stereotyping is avoided. Care would be taken that girls are not 'pushed' to non-formal mode of vocational education but are encouraged to join regular courses. Specific incentives and support systems will be planned to enhance participation and good performance of girls in high employment oriented courses, ensuring their economic self-sufficiency. Special guidance and counseling session would be organized for girls as per need. The vocational coordinator of the school should take necessary steps to remove gender bias, if any, in the minds of employers /financiers against giving the girls employment or loans. The implementation aspects in favour of girls mentioned in other appropriate sections of the scheme would be ensured. All the reporting, data generation should be in gender segregated manner.

## **2.15 Coverage of Special Focus Groups**

**2.15.1** Efforts will be made by the States/UTs to mainstream children belonging to special focus groups i.e. SC, ST, OBC, persons below poverty line, minority and children with special needs, with special attention to the girls belonging to these groups. Special priority would be given to open/strengthen vocational schools/model vocational schools in identified minority/SC/ST concentrated districts/blocks. States/UTs will develop suitable incentives for their participation for which funding provision has been made in the scheme. Enrolment drives, special campuses, provision of special facilities, working in close collaboration with parents and NGOs, etc. should be undertaken to ensure participation of special groups in vocational education. Monitoring attendance, organizing

remedial classes and follow up of special groups will be done by vocational schools.

**2.15.2** Necessary support services e.g. special aids and appliances shall be provided for learners with special needs during the process of learning and training. Arrangements would also be made in schools for removing architectural barriers for easy access of learners with special needs. Teacher preparation for giving due care and attention to such children also need to be ensured. Course fee for children with special needs will be reimbursed by the Government of India, for which a provision has been made in the scheme.

## **2.16 Vocational Guidance and Counselling**

**2.16.1** A Vocational Guidance and Counselling Cell will have to be established by the school offering vocational courses with the help of available faculty. Vocational Coordinator/ Principal should involve the vocational counsellors from time to time on honorarium basis for providing necessary inputs to teachers and guidance to students and parents regarding market trends and suitable vocational choices. The Counsellor would also be responsible for informing students about the various job opportunities, vertical and horizontal mobility and also opportunities for self-employment. Specific counselling drives should be organized in the school involving suitable experts. Students from disadvantaged groups will need specific attention. Care should also be taken that girls should be guided in gender unbiased manner.

## **2.17 Student Support Systems**

**2.17.1** A student support system will be crucial for the success of the vocational education programme. These will include support in determining the equivalence of various courses and qualifications for lateral and vertical mobility.

### **2.17.2 Vertical Mobility**

The implementation of NVEQF, as described in section 1.5 will ensure that vocational students at the +2 level should have access to vocational courses offered at first-degree level and diploma programmes offered by the Polytechnics and Universities/Colleges. Such an entry will facilitate their pathway up to the highest degree i.e., doctorate. On one hand the employability of vocational graduates will determine the success of vocational courses. On the other hand, the nation will benefit if competencies gained by vocational graduates are suitably utilized. For this a thorough review of recruitment rules and procedure are a pre-requisite. In order to achieve this goal, efforts would be made by the vocational education management at the national and state level. Bridge courses/transfer courses would be offered through the Institutions like National Institute of Open Schooling, etc. for enabling students to complete the requirements of admission to a vocational course or for a qualification.

### **2.17.3 Support for Self-Employment**

Besides giving necessary guidance to the students for setting up their ventures, the Vocational Coordinator/ Teachers should continue to provide technical support to them for the transition period. Efforts should be made at appropriate levels to arrange soft loans and to devise marketing strategies for these young skilled entrepreneurs. Best practices in vocational education from the States/UTs should be documented and disseminated so that such practices could be replicated or emulated by others. Special classes on entrepreneurship would be conducted for those students who opt for self employment.

### **2.17.4 Modification of Recruitment Rules**

Rules of recruitment in Government, quasi-Govt. institutions, and public and private sector industries /enterprise should be modified to provide preference to the vocational graduates. The vocational education machinery created at the National and State level should take up this task in consultation with Industry Chambers and Associations. Further, the Department of Personnel in different

States should be pursued to take up this matter on priority. Campus interviews should be organized by the Vocational Coordinator/District Vocational Education Officer for student placement in jobs.

## **2.18 Production-Cum-Training Centre (PTC)**

**2.18.1** Establishment of Production-cum-Training Centres is visualised as a methodology of providing a learning experience linking teaching learning process with the world of work, so that students not only gain relevant skills and attitudes but also the necessary hands on experience to use skills in producing and marketing goods and services. The dichotomy between education and work could be reduced by establishing PTCs in schools, as the production processes become vehicles of learning, which is related to society's needs for goods and services. A large share of earnings through the PTC is distributed amongst students which comes as an incentive and support to them.

**2.18.2** The major objectives of PTCs would be as follows: (i) provide educational experience relevant to market (ii) enhance self-support capabilities (iii) forge institute-community linkages through need based products and services (iv) inculcate the spirit of social accountability in educational institutions and (v) prepare students for gainful self/wage employment.

**2.18.3** Hence, a PTC can be formed in each school considering the scope of the vocational courses offered in the school. Suitable linkages with Institutions like *Jan Shikshan Sansthas* could be established for collaboration. The PSSCIVE would provide the guidelines for establishing and running PTCs in schools and would also organize training programmes for the key functionaries for establishment of PTCs. A provision of providing revolving fund of Rs 25,000/- per course per school has been made in the scheme.

## **2.19 Apprenticeship Training**

**2.19.1** It has been consistently felt that students of the vocational courses at +2 level should be provided facilities for apprenticeship training under the Apprenticeship Act as an important catalyst for promoting vocational education. In 1986, the Apprentices Act was amended to provide training to vocational students of +2 level (Technician Vocational Apprentices). This scheme is being implemented through the four Regional Boards of Apprenticeship Training (BOAT) at Mumbai, Kolkata, Chennai and Kanpur.

**2.19.2** At present there are 94 vocational courses covered under the Apprentices Act, 1961 as at **APPENDIX-A** (page 77 to 79). Efforts would be made to cover additional vocational courses under the Apprentices Act. The State Directorate of Vocational Education and District Vocational Education Office should liaise with the BOATS for apprenticeship training of the students.

## **2.20 Publicity**

**2.20.1** Extensive publicity applying various possible modalities such as local set up as well as mass media (newspapers, magazines, newsletters, radio, television, internet, etc.) should be done for creating the right image of the vocational courses and to attract the youth towards the vocational education. Specific publicity campaigns need to be designed at suitable levels. The scheme has the funding provision for this task.

## **2.21 Programme Monitoring and Evaluation**

**2.21.1** Evaluation and monitoring will be a built-in feature of the programme. Monitoring of programme implementation will be done at various levels, viz., National, State, District and Institutional level. The feedback mechanism would ensure identification of deficiencies in instructions, administration, financial management, etc., so that the functionaries at each level are able to take timely decisions to fill in the gaps in policy-making, direction, budgeting, etc.

**2.21.2** For achieving above, a mechanism will be developed by PSSCIVE, involving independent, external and the existing internal set-ups at various levels. A system of Management Information System (MIS) will be created for proper monitoring and evaluation of the Scheme and for this purpose funding shall be provided from the scheme. The MIS will be developed by PSSCIVE in collaboration with agencies such as National Informatics Centre (NIC) and reputed IT Companies approved by Ministry of Information and Communication Technology. Besides this, monitoring teams will visit the selected schools for assessment of the performance. Community involvement will be ensured for this crucial and complex task. Efforts will be made to ensure that every school is inspected once a year. Monitoring/evaluation teams may be constituted at the district and/or state level.

**2.21.3** In order to effectively run the programme of vocationalisation of education, it is imperative that necessary management structure be created at the State, District as well as Institutional level. This requires creation of separate Directorate of Vocational education in the large States and creating a separate Cell of vocational education, in smaller states. Though some States have created such structure, many of the other States have still to take the necessary action in this regard. Similarly at the District level, it is essential to strengthen the structure by appointing officers who are responsible for supervising and managing the vocational education programme in each of the District.

At the Institution level too, there is a need for better management and supervision of the programme by creating management committees consisting of influential people from the community. This would greatly help in day-to-day management of vocational education.

## **2.22 School Management Committee**

**2.22.1** Every school must set up a School Management Committee (SMC) for smooth functioning and quality assurance of the vocational schools and courses, functioning within nationally set / approved standards and guidelines. The

committee will advise the school in selection of courses, teachers/trainers, guest faculty, equipment etc. It will facilitate setting up of PTC, student support systems and help the school in forging linkages with the industry and student placement for training and employment. The committee will monitor the implementation of the courses, fund utilization and the quality of the students coming out of the system. The committee will be chaired by a person from the industry, business set up or association or a prominent entrepreneur from the offered vocation, with vocational coordinator as its co-chairperson. One full time contractual teacher will be the convener. It will have nominee of the DVEO, nominee of the PRI/PTA, and one member from industry for each of the vocation being offered by the school. District Employment Officer or his/her nominee, full time contractual faculty and guest faculty of the school and one student representative from each vocational course will also be the members of this committee. In case of need, these committees can set up vocational advisory committee to improve implementation and quality. In addition, these will perform such other functions as entrusted to them by the State or National level bodies (MHRD, PSSCIVE).

### **3 MANAGEMENT STRUCTURE**

**3.1** The new scheme on vocational education requires flexibility within structures, programmes and delivery processes in order to respond to fast changing market, variable skill demands and corresponding societal aspirations from education. To achieve the desired goals of the new scheme, a separate institutional mechanism and sound management structure for vocational education will be established at the National, State and District level for effective planning, implementation, monitoring and quality vocational education programme, which would include strengthening of the existing management structures at various levels.

**3.1.1** To formulate the policies and strategic decisions on vocational education, an Executive Council for Vocation Education (ECVE) would be formed with Union Minister for Human Resource Development as its Chairperson. This would have Minister of Labour and Employment, and the concerned Ministers from a few



States and UTs, Secretary, Department of School Education and Literacy, MHRD; Joint Director, PSSCIVE, Chairperson, NIOS as its members. Joint Secretary, Vocational Education in the Department of School Education and Literacy, MHRD, will be the Member Secretary.

**3.1.2 The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE)** would be strengthened further to make a coordinating agency for vocational education and promote the interface between education and industry. It would also continue its function of providing R&D inputs to the VE programmes, Curriculum Development, Teaching Learning and other support materials and organization of Orientation and Training Programmes for key functionaries and teachers/trainers.

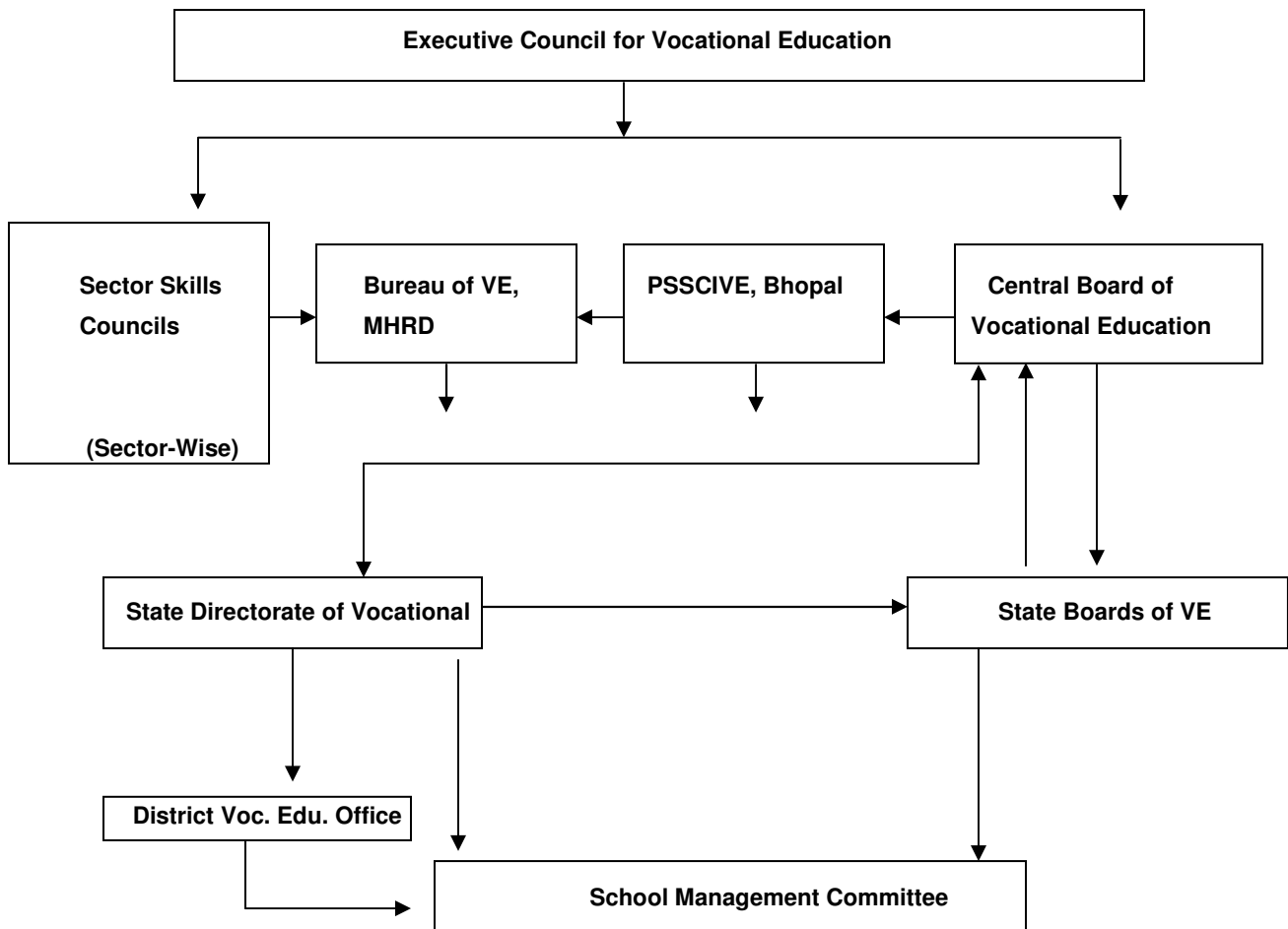
**3.1.3 Central Board of Vocational Education (CBVE), and State Boards of Vocational Education (SBVE)** would be established eventually for appointing assessors and conducting competency based assessment and certification. Till the establishment of CBVE and SBVE, the functions of these boards may be performed by setting up a cell in CBSE and in respective State Education Boards respectively.

**3.1.4 Establishment of State Directorates of Vocational Education (SDVE)** in all the States/UTs should be taken up for effective implementation and monitoring of VE programmes.

**3.1.5 Establishment/Strengthening of District Vocational Education Offices (DVEO)** in all districts of the States and UTs should be taken up in a phased manner to take up implementation and monitoring at the district level.

**3.1.6 Setting up of School Management Committees (SMC)** to facilitate implementation and quality assurance of Vocational Courses at School level.

### 3.1.7 Schematic Representation of Management Structure



### 3.1.8 Abbreviations

- i. ECVE : Executive Council on Vocational Education
- ii. MHRD : Ministry of Human Resource Development
- iii. BVE : Bureau of Vocational Education
- iv. SSC : Sector Skills Council
- v. PSSCIVE : PSS Central Institute of Vocational Education
- vi. CBVE : Central Board of Vocational Education
- vii. SDVE : State Directorate of Vocational Education
- viii. SBVE : State Board of Vocational Education

- ix. DVEO : District Vocational Education Office
- x. SMC : School Management Committee

### **3.2.1 VOCATIONAL SCHOOL**

#### **I. New Vocational Schools**

Assistance for:

- |    |   |             |
|----|---|-------------|
| 1) | Vocational Coordinator/Principal                  | 01          |
| 2) | Full-time Vocational Teachers (on contract)       | 03          |
| 3) | Guest Faculty                                     | as per need |
| 4) | Lab Assistant                                     | 02          |
| 5) | Secretarial Staff (On contract or by outsourcing) |             |
|    | Accountant-cum-clerk                              | 01          |
|    | Helper  | 01          |
|    | Security personnel                                | 01          |

#### **II. Strengthening of Existing Vocational Schools**

Assistance for:

- |    |                                  |             |
|----|----------------------------------|-------------|
| 1) | Vocational Coordinator/Principal | 01          |
| 2) | Guest Faculty                    | as per need |

#### **FUNCTIONS**

- (i) To establish an effective and efficient VE system in the Institution for promotion of equality of opportunity for all.
- (ii) To run approved vocational courses/skills development programmes consistent with nationally recognized skill standards.
- (iii) To provide or arrange a range of support services to the students such as arranging on-the-job training, establishment of training-cum-production centre, establishment of linkages with industry, arranging guidance and counseling, etc.

- (iv) To arrange competent teachers/trainers and ensure their continuing education and training through various programmes and action researches.
- (v) To undertake publicity, image building and awareness programmes.
- (vi) To participate in distance education e.g., as Accredited Vocational Institutes of National Institute of Open Schooling (NIOS).
- (vii) Keep track of vocational students passing out with regard to their employment, vertical or lateral mobility etc. and maintain records.
- (i) To maintain and disseminate relevant information at various levels as a part of school level MIS.
- (ii) To decide nature of incentives to be given for enhancement of enrolment of girls, SC/ST/OBC, minorities, BPL, PWD etc.

#### **4 NORMS FOR FINANCIAL ASSISTANCE**

**4.1** The responsibility of preparing the consolidated proposals (including prospective proposals) for approval from MHRD, will lie with the concerned States till the time of establishment of the State Directorates of Vocational Education (SDVE). They can prepare it on their own or get it done through the District Vocational Education Office (DVEO). Alternatively, schools, which intend to participate in the scheme can also submit a proposal directly to the SDVE for consideration, with a copy for information to the DVEO. A Project Approval Board (PAB) will be constituted under the Chairmanship of the Secretary (SE&L), MHRD to consider and approve the proposals for grants-in-aid. The other members of the Committee would include Joint Secretary (SE), Financial Advisor (MHRD), two experts in the field of Vocational Education, Joint Director (PSSCIVE), Chairman, NIOS, a representative of Ministry of Labour and Employment. Divisional Head (VE), MHRD will be the Member Secretary of the Committee.

**4.2** It will be a Centrally Sponsored Scheme under which one time non-recurring and annual recurring grant will be sanctioned by the MHRD to the State

Governments. Under the Scheme, financial assistance will be provided to Government Higher Secondary Schools/ Government aided Higher Secondary Schools/ Private Unaided Schools/ NGOs for setting up and operating Vocational Education programmes. Till the SDVEs are set up separately, the funds shall flow through the concerned State. The costs/remuneration, etc. will be subject to revision from time to time on approval from the Executive Council.

**4.2.1** The scheme will be evaluated by an Expert Committee appointed by MHRD, Govt. of India at the mid point or after the completion of 2 years of the scheme.

**4.2.2** Since the vocational schools will mostly be located in the campus of a regular higher secondary school, an agreement would have to be signed between the Principal of the school and the Vocational Coordinator regarding sharing of facilities, etc.

### **4.3 GRANT TO NGOs/VOLUNTARY AGENCIES.**

**4.3.1** The role of voluntary agencies/expert groups is crucial to the programme of vocationalisation of education. Voluntary/Non-governmental Organisations with at least three years' standing and qualified to take up innovative programmes in the field of vocationalisation of education and registered under the Societies Registration Act, 1860 or similar enactments will be eligible for financial assistance for taking up innovative programmes for promotion of vocationalisation on project basis. These project activities may include conduct of innovative employable short duration vocational courses.

**4.3.2 Procedure for grant to NGOs/voluntary agencies:** The proposals will be routed through the respective State Governments. On the basis of the proposal approved for the voluntary agency, the grant shall be released every year in two

installments – 50 per cent of the year's grant in first installment and the remaining 50 per cent after the agency reports utilization of at least 75 per cent of the grant sanctioned earlier. The request for release of second installment should be accompanied by a progress report and statement of expenditure. Grants in the second and subsequent years will be released on a similar basis provided that before the release of second installment of grant in a year, utilization certificate and audited account in respect of the grants released in the preceding years should also be furnished. As far as the voluntary agencies, public trusts and non-profit making companies are concerned, in order to be eligible for financial assistance under this scheme they should:-

- (i) have a proper constitution of articles or association;
- (ii) have a properly constituted managing body with its powers and duties clearly defined in the constitution;
- (iii) be in a position to secure the involvement, or voluntary basis of knowledgeable persons for furtherance of their programmes;
- (iv) not be run for the profit of any individual or a body of individuals;
- (v) not discriminate against any person or group of persons on the ground of sex, religion, caste or creed;
- (vi) not directly function for the furtherance of the interests of any political party; and
- (vii) not in any manner incite communal disharmony.

**4.3.3** If any agency is already receiving or expecting to receive grant from some other official source for a project for which application is made under this scheme, the assistance under this scheme will be made after taking into consideration the grant received, or likely to be received from such other official source. It should also be ensured that an agency already in receipt of a grant from any other official source. Central or a State, should not transfer any part of that liability to a grant to be sanctioned under this scheme.

**4.3.4 The conditions of grant shall be as follows:**

- (i) An agency in receipt of financial assistance shall be open to inspection by an officer of the Union Ministry of Human Resource Development or the State Education Department.
- (ii) The accounts of the project shall be maintained properly and separately and submitted as and when required. They should be open to check by an officer deputed by the Government of India or the State Government. They shall also be open to a test check by the Comptroller and Auditor General of India at his discretion.
- (iii) The audited accounts together with the utilization certificate in the prescribed form duly countersigned by the Chartered Accountants are required to be furnished within six months in respect of a preceding year or after expiry of the duration for which grant is approved, with the verification certificate of the State Government.
- (iv) The agency shall maintain a record of all assets acquired wholly or substantially out of Government grant and maintain a register of such assets in the prescribed proforma. Such assets shall not be disposed of, encumbered or utilized for the purposes other than those for which the grant was given, without prior sanction of the Government of India. Should the agency cease to exist at any time, such properties shall revert to the Government of India.
- (v) When the State Govt./Government of India have reasons to believe that the sanctioned money is not being utilized for the approved purpose the payment of grant may be stopped and the earlier grants recovered.
- (vi) The institution must exercise reasonable economy in the working of the approved project.

#### **4.4 COST ESTIMATE FOR DIFFERENT COMPONENTS OF THE SCHEME**

**4.4.1.** The detailed physical and financial requirement for 2011-12 is at **APPENDIX-B** (page to 80-82 ).

#### 4.4.2 ESTABLISHMENT OF NEW VOCATIONAL EDUCATION SCHOOLS

##### Unit Cost estimate for Establishing and Running a New Vocational Education School

- (i) **Objective:** To introduce vocational courses in higher secondary schools
- (ii) **Target group:** Pass outs of Class X
- (iii) **No. of vocational courses :** 2 per school
- (iv) **No. of students per vocational course:** 50 (25 in each Class i.e. XI & XII).
- (v) **No. of vocational students in each school:** 100
- (vi) **No. of Sections in each School:** 4

#### I. NON-RECURRING EXPENDITURE

No.	Components	Expenditure (Rs. in lakhs)*	Centre: State share
1.	<b>Civil Work:</b>		
	(i) 04 Classrooms (each of 7 X 7 sq. meter)	13.72	75:25
	(ii) 02 Workshop/laboratory (each of 10 X 10 sq. m)	14.00	
	(iii) 01 Office room (7 X 7 sq.m)	3.43	
	<b>Sub-total</b>	<b>31.15</b>	
2.	Tools, Equipment and Furniture	5.0	100% CA
3.	Computers	3.0	
4.	Diesel Generator Set	2.0	
	<b>Sub-total</b>	<b>10.0</b>	
	<b>Total</b>	<b>41.15</b>	

**Note:**



- (i) A suitable piece of land will be provided by the State Government for construction of classrooms, workshops and office room within the premises of the existing higher secondary school.
- (ii) Re-appropriation of funds among the heads would be allowed after due approval of the competent authority.
- (iii) The size of classroom, workshop and office room is as per the norms approved in the scheme of Rashtriya Madhyamik Shiksha Abhiyan (RMSA).
- (iv) Cost of construction works out to Rs. 7000 per sq.m (Rs 650 per sq.ft.) (The cost of construction may vary from place to place and quality of construction. Therefore, civil work should be done as per the CPWD / State PWD norms).

## II. RECURRING EXPENDITURE

No	Components	Annual expenditure ( Rs in lakhs)	Centre:State share
1.	Vocational Coordinator (regular) (01) @ Rs 35,000 p.m. (for 12 months)	4.20	90:10
2.	Vocational Teacher (04) (on contract) @ Rs 25,000 p.m. (for 10 months)	10.00	
3.	Guest Faculty (honorarium @ Rs 200/- per hour) (on contract for 10 months)	1.00	
4.	Lab Assistant (02) @ Rs 15,000 p.m. each (on contract for 10 months)	3.0	
5.	Secretarial Staff (On contract or by outsourcing) (i) Accountant cum clerk – 01 @ Rs 12,000/- (ii) Helper - 01 @ Rs 8,000/- (iii) Security personnel – 01 @ Rs 5,000/-	3.0	
<b>Sub-total</b>		<b>21.20</b>	

6.	Raw Materials (including raw materials required for running PTC) @ Rs 75,000 per course	1.5	100% CA
7.	Books, Software, Educational CDs, etc.	0.15	
8.	Seed money for running of Production cum Training Centres (PTCs)	1.0	
9.	Office Expenses/ Contingencies (including expenditure on publicity, guidance and counselling, transport, field visits, postage, stationery, electricity, water etc.)	2.4	
<b>Sub-total</b>		<b>5.05</b>	
<b>Total</b>		<b>26.25</b>	

#### 4.4.3 STRENGTHENING OF EXISTING VOCATIONAL SCHOOLS.

Since the inception of the Centrally Sponsored Scheme on Vocationalisation of Secondary Education (1988), about 10,000 vocational schools have been sanctioned, out of which some of them need to be strengthened. Provision has been kept for some existing schools on per capita basis.

#### Cost Estimate for Strengthening an Existing Vocational School

- (i) **Objective:** To strengthen the existing vocational schools
- (ii) **Target group:** Pass outs of Class X
- (iii) **No. of vocational courses:** 02 per school
- (iv) **No. of students per vocational course:** 50 (25 in each class i.e. Class XI & XII).
- (v) **No. of students in each school:** 100
- (vi) **No. of section in each School is:** 4

## I. NON-RECURRING EXPENDITURE

No.	Components	Expenditure (Rs in lakhs)*	Centre: State share
1.	(i) Tools and Equipment	2.0	100% CA
	(ii) Computers	3.0	
	(iii) Diesel Generator Set	2.0	
	(iv) Office Equipment & Furniture	2.0	
	(v) Contingencies	1.0	
	<b>Total</b>	<b>10.00</b>	

**Note:** Re-appropriation of the funds among the heads mentioned above would be allowed after due approval from the competent authority.

## II. RECURRING EXPENDITURE

No.	Components	Annual expenditure (Rs in lakhs)	Centre:State Share
1.	Vocational Coordinator (regular) @ Rs 35000/- p.m. (for 12 months)	4.20	90:10
2.	Guest Faculty (honorarium @ Rs 200/- per hour) (for 10 months)	1.00	
<b>Sub-total</b>		<b>5.20</b>	
3.	Raw Material (including raw material required for running PTC) @ Rs 75,000 per course	1.50	
4.	Books, Software, Educational CDs, etc.	0.15	
5.	Seed money for running Production cum Training Centres (PTCs)	1.00	

6.	Minor repair and renovation of Classrooms (02), Workshops (02), Laboratory (01) and Office room (01) @ Rs 25,000/-	1.50	100% CA
7.	Office Expenses/ Contingencies (including expenditure on publicity, guidance and counselling, transport, field visits, postage, stationery, electricity, water etc.)	2.4	
	<b>Sub-total</b>	<b>6.55</b>	
	<b>Total</b>	<b>11.75</b>	

**Note:**

(i) Minor repair and renovation will be done as per the approved norms of CPWD/ State PWD. The civil work can be undertaken for the following: (a) classroom, (b) workshop, and (c) laboratory.

**4.4.5. Training of Teachers (In-service)**

**Unit cost of training is as under:**

**I. Teacher Training – Batch of 30 Teachers (7 days In-service training)**

1	TA/DA to Teachers @ Rs. 4000/- per trainee (30 x 4000)	1,20,000.00
2	Local conveyance to 4 Resource Persons (limited to 1 DA @ Rs 300/-) (300 X 7X 4)	8,400.00
3	Honorarium to Resource Persons @ Rs. 500/- per day for 4 persons per day (500x4x7)	14,000.00
4	Honorarium to Honorary Director @ Rs. 800/- per day (800x1x7)	5,600.00
5	Working lunch @ Rs. 60/- (60x30x7)+ Tea @ Rs 20/-	16,800.00

	(20x30x7)	
6	Institutional charges @ Rs. 1000 /- per day	7,000.00
7	Stationery @ Rs 20/- ( 20 X 30)	15,000.00
8	Miscellaneous (including expenditure on raw materials, daily wager, banner, field visit, photography, etc.)	15,000.00
	<b>TOTAL</b>	<b>1,87,400.00</b>

Cost per trainee for 7 days = Rs. 6,246/-

Unit cost for trainees per day = Rs 1,87,400 / 7=26771/30 = Rs 892/-

## II. Teacher Training – Batch of 30 Teachers (30 days Induction training)

1	TA/DA to Teachers@ Rs. 4000/- per trainee (30 x 4000)	1,20,000.00
2	Local conveyance to 4 Resource Persons (limited to 1 DA @ Rs 300/-) (300 X 30X 4)	36,000.00
3	Honorarium to Resource Persons @ Rs. 500/- per day for 4 persons per day (500x4x30)	60,000.00
4	Honorarium to Honorary Director @ Rs. 800/- per day (800x1x30)	24,000.00
5	Working lunch @ Rs. 60/- (60x30x30) + Tea @ Rs 20/- (20x30x30)	72,000.00
6	Institutional charges @ Rs. 1000/- per day (30 days)	30,000.00
7	Stationery @ Rs 20/- (20 X 30)	600.00
8	Miscellaneous (including expenditure on raw materials, daily wager, banner, field visit, photography, etc.)	45,000.00
	<b>TOTAL</b>	<b>3,87,600.00</b>

Cost per trainee for 30 days - Rs. 12,920/-

Unit cost (per trainee per day) - Rs 431/-

*The above funds will be released to PSSCIVE, based on the proposal received, which will conduct training programmes in consultation with State/UT Directorate of Vocational Education and State Board of Vocational Education.*

- \* 7 Days in service training will be given to the same teachers every year for upgrading their skill and knowledge.
- \*\* 30 Days induction programme training will be given to newly appointed teachers. Newly appointed teachers will be given in-service training after one year.

#### 4.4.6 VE CELL UNDER THE CENTRAL BOARD OF SECONDARY EDUCATION

##### I. NON-RECURRING EXPENDITURE

No.	Components	Expenditure (Rs in lakhs)
1	Equipment – computer, printer, fax machine	100.00
2.	Furniture	
	<b>Total</b>	<b>100.00</b>

*A separate vocational education Cell will be setup in CBSE as precursor to Central Board of Vocational Education (CBVE).*

##### II. RECURRING EXPENDITURE

No.	Components	Expenditure (Rs in lakhs)
1	Documentation, publication, reports, web, publicity	5.0
2	Assessment (including skill testing), Accreditation & Certification	30.0
3	Office Expenses/ Contingencies	10.0
4	Traveling Allowance	5.0
	<b>Sub-total</b>	<b>50.0</b>

#### **4.4.7 DEVELOPMENT OF COMPETENCY BASED CURRICULUM AND LEARNING MATERIALS**

- (i) Number of Modules to be developed for the Vocational Courses during 11<sup>th</sup> Five year plan.
- (ii) Approx expenditure on development of curriculum and learning materials per course = 2.0 lakhs.
- (iii) Training manuals and other learning materials would be distributed free of cost to the vocational students.

Note: The training package will include the following materials:

1. Trainers Guide
2. Training Manual
3. Assessment Guidelines
4. Multi-media Packages
5. E-material

The work will be undertaken by PSSCIVE, Bhopal in consultation with CBVE/SBVE/NIOS / CBSE / State Education Boards etc.

#### **4.4.8 ESTABLISHMENT OF MANAGEMENT INFORMATION SYSTEM (MIS) AND WEB PORTAL ON VOCATIONAL EDUCATION AND TRAINING DURING 11<sup>TH</sup> FIVE YEAR PLAN**

MIS and Web Portal will be developed at all level i.e. National, State, District and School levels. The requirement will be worked out on the basis of proposals received from States/UTs. A financial requirement of Rs 1.00 crore has been estimated.

#### **4.4.9 ASSISTANCE TO VOCATIONAL SCHOOLS UNDER PPP MODE**

25% seats will be filled by children of socio-economically weaker sections (SC/ ST/ OBC/ Minorities/ children with special needs/ persons Below Poverty Line; out of which 50% would be girls), who will be sponsored through Government grant under this scheme. Reimbursement will be made for these students @ **Rs.19,000/- per student per annum.**

- i. No. of vocational courses : 02
- ii. No. of students per school : 100
- iii. No of children to be reimbursed : 25  
(25% of total in each school)

**I. NON-RECURRING EXPENDITURE:** Will be met by the concerned school.

**II. RECURRING EXPENDITURE** – indicative for the purpose of calculating the per child reimbursement to the school

No.	Components	Monthly Expenditure (Rupees)	Annual expenditure (Rs in lakhs)
1.	Vocational Coordinator (regular) (01) @ Rs 35,000 p.m.	35,000	4.2
2.	Vocational Teacher (03) (on contract) @ Rs 25,000 p.m. (for 10 months)	75,000	7.5
3.	Guest Faculty (honorarium @ Rs 200/- per hour) (for 10 months)	As per norms	1.0
4.	Lab Assistant-cum-Storekeeper–02 @ Rs 15,000/-each (on contract) (for 10 months)	30,000	3.0
5.	Secretarial Staff (Accountant/Cashier - 01, Security Personnel - 01, Helper - 01, etc.) (on contract) (for 10 months)	30,000	3.6



<b>Total</b>		<b>19.3</b>
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Per child expenditure: Rs. 19.3 lakh/100= Rs. 19,300/-

#### **4.4.10 Assistance to the NGOs/VOs for undertaking innovative programmes in vocational education**

- i. No. of vocational courses in each NGO : 02
- ii. No. of trainees per NGO : 100

#### **I. NON-RECURRING EXPENDITURE**

<b>No</b>	<b>Components</b>	<b>Expenditure (Rs. in lakhs)</b>
1.	Tools and equipment (including computers)	2.50*
	<b>Total</b>	<b>2.50*</b>

Note: \* Actual cost will vary from course to course.

#### **II. RECURRING EXPENDITURE**

<b>No</b>	<b>Components</b>	<b>Monthly Expenditure (Rupees)</b>	<b>Annual expenditure (lakhs)</b>
1.	Vocational Coordinator - Rs 35,000/-	35,000	4.2
2.	Vocational Teacher (02) Rs 25,000/-	50,000	6.0
3.	Guest Faculty (honorarium @ Rs 200/- per hour)	As per norms	1.0
4.	Lab Assistant/Office Staff (02) Rs 15,000/- each	30,000	3.6
5.	Raw Material @ Rs 75, 000/- per course	--	1.5
6.	Books, Software, Educational CDs, etc.	--	0.15

7.	Office expenses and contingencies (travelling allowance, field visits, etc.)		1.0
	<b>Total</b>		<b>17.45</b>

Continuation of funds for subsequent year will depend on the satisfactory performance of NGOs. Those NGOs whose performance will not meet benchmark, will not be eligible for subsequent funds. Tools and equipment will be transferred to eligible NGO of near by area.

#### **4.5 MANAGEMENT, MONITORING, EVALUATION AND RESEARCH**

##### **4.5.1 MANAGEMENT STRUCTURE OF IMPLEMENTATION OF VOCATIONAL SCHEME.**

The structure of the new scheme will be demand driven with the options of multiple entry and exit for the students. To achieve the desired goals of the new scheme a sound management structure will be established at national, state, district and school level.

An Executive Council for Vocational Education under chairpersonship of Ministry of Human Resource Development would be formed to formulate policies & strategic decisions It will be the highest decision making body for the scheme. The Council will consist of representatives of Ministry of Finance, Planning Commission, Ministry of Labour and Employment, Ministry of Panchayati Raj, Ministry of Social Justice & Empowerment, Ministry of Tribal Affairs and Ministry of Minority Affairs. Since rapid change in technology are taking place, keeping in view the requirement of the industry and the need of State Governments, the Council will be authorized to modify unit costs from time to time based on need and subject to the overall framework of the scheme and the overall financial envelope. State Directorate of Vocational Education in all the States would be set up in phases for programme management and implementation. District

Vocational Education Offices would be set up in a phased manner for programme management and implementation at the district level. School Management Committees would be formed in each school imparting vocational education. School Management Committees (SMC) will have representatives of State Government, Teachers Association partners, local employer/industry and a representative of trainees/students.

#### **4.5.2 MONITORING AND EVALUATION**

A Management Information System (MIS) would be developed for monitoring of the scheme. Monitoring teams would also be constituted at various levels to visit the State & District Offices and to inspect schools. Efforts would be made to ensure that every school is inspected at least once in a year. Evaluation studies and sample surveys would be conducted regularly at district and school levels. Evaluation criteria would be evolved at Central & State levels. District level evaluation studies would be conducted by the States/UTs & school level studies would be conducted by the District Vocational Education Officer.

#### **4.5.3 RESEARCH**

There will be provision for independent research on different activities preferably in collaboration with relevant industry associations. The findings of the research studies will be used to further improve the contents of the scheme. The research would also include collection of information on employment scenario of vocational students and tracking of their post-school movement.

**4.5.4** In order to meet the expenditure on management, monitoring, evaluation and research 6% of the project cost is earmarked for these activities.

**APPENDIX-A****LIST OF DESIGNATED TRADES FOR THE TECHNICIAN (VOCATIONAL)  
APPRENTICES**

1. Accountancy & Auditing	48. Instrumental Music (Percussion Table)
2. Agriculture chemicals	49. Insurance
3. Agro Based Food Industries (Animal Based)	50. Interior Design
4. Agro Based Food Industries (Crop Based)	51. Knitting Technology
5. Agro Based Industries (Feed Based)	52. Library and Information Science
6. Apiculture	53. Maintenance, Repair of Electrical Domestic Appliances
7. Audio-Visual Technician	54. Marketing & Salesmanship
8. Auxiliary Nurse and Mid Wives	55. Material Management Technology
9. Banking	56. Mechanical Servicing
10. Basic Financial Services	57. Medical Laboratory / Technology / Assistants
11. Bharatanatyam	58. Medical & Aromatic Plant Industry
12. Bio Medical Equipment and Technician	59. Multipurpose Health Worker
13. Bleaching, Dyeing and fabric Painting	60. Multi Rehabilitation Worker
14. Building Maintenance	61. Nursing
15. Building and Road Construction	62. Nutrition & Dietetics
16. Catering and Restaurant Management	63. Office Management
17. Ceramic Technology	64. Office Secretaryship / Stenography
18. child care and Nutrition	65. Ophthalmic Technician
19. Civil Construction / Maintenance	66. Pharmacist
20. Classical Dance (Kathak)	67. Photography
21. Clothing for the Family	68. Physical Education
22. Commercial Art	69. Physiotherapy & Occupational Therapy
23. Commercial Garment Designing & Making	70. Plant Protection

24. Computer Technique	71. Plantation Crops and Management
25. Co-operation	72. Post Harvest Technology
26. Cotton Classifier	73. Poultry Farming
27. Crop Cultivation / Production	74. Pre-School & Crèche Management
28. Dairying	75. Primary Health Worker
29. Dental Hygienist	76. Purchasing & Store- Keeping
30. Dental Technician	77. Receptionist
31. E.C.G. and Audiometric Technician	78. Repair & Maintenance of Power driven Farm Machinery
32. Export-Import Practices & Documentation	79. Rubber Technology
33. Fish Seed Production	80. Rural Engineering Technology
34. Fisheries / Fish Processing	81. Seed Production Technology
35. Fishing Technology	82. Sericulture
36. Floriculture	83. Sheep & Goat Husbandry
37. Food Preservation	84. Soil Conservation
38. Health Sanitary Inspector	85. Structure & Fabrication Technology
39. Health Worker	86. Sugar Technology
40. Healthcare & Beauty culture	87. Swine Production
41. Horticulture	88. Tanneries
42. Hospital Documentation Assistant	89. Taxation Practices/Taxation Laws/Tax
43. Hospital Housekeeping	90. Textile Designing
44. India Music (Hindustani Vocal Music)	91. Tourism and Travel Techniques
45. Industrial Management	92. Vegetable Seed production
46. Indian Fisheries	93. Veterinary Pharmacist – cum- Artificial Insemination Assistant
47. Institutional Housekeeping	94. X-Ray Technician

**APPENDIX-B**

**Physical and Financial Estimates under the Revised Scheme " Vocationalisation of Higher Secondary Education"**

Rs in lakhs

	<b>Component</b>	<b>Physical targets</b>	<b>Non recurring [sharing pattern]</b>	<b>Financial req</b>	<b>Central share</b>	<b>Recurring [sharing pattern]</b>	<b>Financial req</b>	<b>Central Share</b>	<b>Total Financial Req</b>	<b>Central Share</b>
1	New vocational schools	100	(i) Civil works @ Rs 31.15 [75:25]	3115.00	2336.25	(i) Teachers staff salary @Rs 21.20 [90:10]	2120.00	1908.00	5235.00	4244.25
			(ii) tools, equipment, etc @ Rs 10.00 lakhs [100% CA]	1000.00	1000.00	(ii) raw materials, books, s'ware, OE, PTC @Rs 5.05 lakhs [100% CA]	505.00	505.00	1505.00	1505.00
2	Strengthening of existing schools	1000	Tools, equipment, etc @ Rs 10.00 lakhs [100%	10000.00	10000	(i) Teachers staff salary @Rs 5.20 [90:10]	5200.00	4680.00	21750.00	21230.00

			CA]			(ii) raw materials, books, s'ware, OE, PTC @Rs 6.55 lakhs [100% CA]	6550.00	6550.00		
3	NGO component	150	Tools, equipment, etc @ Rs 2.5 lakhs [100% CA]	375.00	375.00	(i) Teachers staff salary @Rs 14.8 [100% CA]	2220.00	2220.00	2925.00	2925.00
						(ii) raw materials, books, s'ware, OE, PTC @Rs 1.75 lakhs [100% CA]	330.00	330.00		
4	Assistance to vocational schools under PPP mode	500	Reimbursement for 25% students in each school @ Rs 0.19 lakhs [100% CA]						2375.00	2375.00
5	VE Cell under CBSE	1		100.00	100.00		50.00	50.00	150.00	150.00

6	Training of teachers	2000	In service training @ Rs 1.87 lakhs/ batch of 30 teachers	124.00	124.00
		1000	Induction training @ Rs 3.87 lakhs/batch of 30 teachers	130.00	127.42
7	Development of competency based curriculum and learning material for 250 modules			500.00	500.00
8	MIS & web portal			100.00	100.00
	<b>TOTAL</b>			<b>34794.00</b>	<b>33280.67</b>
9	Management, M&E, Research @ 6% of the total allocation			2087.64	2078.02
	<b>GRAND TOTAL</b>			<b>36881.64</b>	<b>35358.69</b>



