

primary level, in the shorter term resource constraints necessitate a narrower pilot programme.

Over the period to 2002, therefore, selected urban primary schools will, in concert with feeder secondary schools, develop and implement pilot English language programmes from grade 5, continuously monitored by MOEYS supervisory staff. Decisions will be taken on the longer term expansion of the programme on the basis of the pilot experience. For pilot schools, a revised and expanded English curriculum from grade 5 to 12 will be fashioned from the MOEYS grades 7 to 12 curriculum and primary school teachers with basic English language competencies trained to deliver the pilot curriculum. The lead time necessitated by these tasks predicated against start up of foreign language teaching in selected primary schools until the 1999-2000 school year, with teacher training beginning in 1998-99.

**Teaching of French in general education.** The French language will also be taught as a school-level foreign language in schools where demand for French is strong and competent teachers are available. MOEYS will formulate a master plan for future investment in training of teachers of French for primary and secondary levels.

Government has invested, with assistance from the Government of France, in the development of a curriculum and textbooks for the introduction of French at the upper primary level. Selected teacher trainees in TTCs in three provinces are currently being prepared for primary level French teaching with SIPAR assistance. The new curriculum and associated textbooks will be introduced into selected (indicatively 50) primary schools from the 1997 -98 school year. Further investment in the preparation of teachers of French at the primary level will be determined by the outcome of piloting and an assessment of relative demand for English and French at this level.

**Training foreign language teachers.** Government recognises the need to establish the relative demand for the two principal foreign languages, French and English, in order to make teacher training investment decisions. Teacher training to date has been project-led with emphasis on supply (based on donor resources made available). In the future, Government will assess the relative demand for English and French language instruction at the school level (grades 5 through 12), and in the employment marketplace, in order to project teacher training requirements for the medium to long term. Follow up studies will be required intermittently to track demand so long as an open foreign language policy remains in effect, and teacher training plans modified to match demand trends. One recent survey suggests that the demand for English language training far exceeds French, although teacher training investments over the last five years have been far larger for French than for English. In view of the urgency of determining the balance of future investment, a *Foreign Language Teaching Policy Study* will be undertaken in 1998.

**Language teacher wastage rates.** The high demand for foreign language skills in the growing urban economies of Cambodia results in a high premium on competent foreign language trainees. A 1996 tracer study of graduates of AusAid-funded training of English language teachers at the *Center for Foreign Languages* revealed that after two years none of the trainees remained in the teaching service. Projected economic growth patterns suggest that the premium on foreign language skills will not diminish in the medium to long term. Government will have to determine how to retain foreign language teacher trainees in the teaching service for a longer period to provide adequate return on the training investment. Innovative strategies will have to be considered if foreign language teaching is to be viable. This issue will also be considered in the policy study.

**Preliminary training plan** In view of the number of foreign language teaching issues to be resolved (demand, curriculum, trainee retention), training plans will continue to be based on donor project supply provisions in the short term. Although the first draft *Master Plan for the English Language* (1996) has made some preliminary forecasts for English language training, further detailed work is needed to refine these. The CAMSET follow-on project (CAMSET2) promises to develop MOEYS capacity to plan for training needs in English language (*Cambodia: Secondary English Teaching Upgrading Project 1997-2000*). A medium to long term training plan will be developed following the policy study.

**Pre-service Teacher Training** Government further recognises that in order to implement its foreign language policy, secondary teachers across the board will have to have foreign language skills (not limited to specialised teachers of English or French). Acquisition of basic language competencies in one of the foreign languages will be required of every new teacher entering the system from 1999. This will involve the development and implementation of a basic foreign language curricula for all secondary level trainees entering pre-service programmes from September 1997.

**Specialist Language Teacher Training Curriculum reform** The need to reform existing teacher training curricula consistent with the approaches of the new secondary curricula and grade 7 to 12 textbook courses for the two languages is urgent. TTC and FOP training programmes for new entrants into the teaching service will have to be consistent with and supportive of the implementation of the new approaches of the curriculum and related instructional materials.

In summary, the main policy directions are :

- Foreign language provision for entire secondary school population in long term
- Foreign language choice demand-driven

- English and French language teaching introduced from upper primary level for selected school in the medium term; expansion to wider cohort of primary schools in the longer term based on lessons learnt from piloting
- Re-orientation of foreign language teachers in service consistent with MOEYS curricula and textbooks
- Basic foreign language capability a requirement for all TTC graduates from 1999.

## 2.11 Technology, Science & Mathematics in general education: policy directions

***Ensuring labour competitiveness in ASEAN.*** Government recognises that impending ASEAN membership, gives great urgency to the development of technological and scientific capabilities in the Cambodian labour force. Without increased individual competencies in basic mathematical and scientific skills, and without creative and innovative abilities in design and technology, Cambodia will lack competitiveness in relation to the labour forces of its regional neighbours as it develops its economic base. Mathematics and Science teaching and learning in general education will have to be reformed to ensure that graduates of basic education have a sound basis for applying modern technology in the world of work. Creative thinking skills in design and application will have to be infused into the mathematics and science curricula, and teachers oriented to an enhanced *raison d'être* for these subjects. The burgeoning growth of urban society underscores the need for a large reservoir of numerate and scientifically literate students for the labour market and for further specialist training in scientific or technological fields.

***Environmental education thrust.*** Government is also aware that people at every level need to be environmentally aware, and be able to make informed judgements on the environmental impact of economic, scientific and technological developments. Cambodia was blessed with a natural environment largely intact until recent years, but economic and exploitative pressures are seriously endangering it. Environmental awareness and conservation values must be developed through the school curriculum, and teachers sensitised to the issues and trained in the delivery of environmental education through the core subjects. The *Environmental Education* materials drafted in 1997 (with UNDP/ETAP assistance) will have to be infused into the curriculum reform and textbook development processes, and incorporated into the working teacher training programmes. The Science curriculum will be one vehicle for the development of environmental awareness and related skills.

**Science Curriculum issues.** The *Secondary Schools Survey of Science and Mathematics Education* (1996) found that few schools had the capacity to deliver science courses with any practical base - very few had science equipment, materials or working laboratory space. Few teachers have any capacity to teach practical science or technology. Little time has been spent on Science in the TTC programme for primary teachers; there has been no investment in the working teachers' skills in the area of Science in the major quality improvement investments (UNICEF, PASEC, CAPE and NGOs). Societal issues related to reproduction, health care, disease prevention, nutrition are inadequately addressed in the present curriculum. MOEYS recognises the imperative to address the issue of what are the Science needs in general education, how these needs will be met and phased, and how the teaching force will be prepared to implement the curriculum effectively. Both pre-service and working teacher programmes will have to be radically reviewed to incorporate the new directions in science education which will emerge.

**Mathematics for life and the workplace.** MOEYS is also aware that the Mathematics curriculum has to be reformed for greater appropriateness to the broad cohort of the school population who will enter the workplace and complete formal schooling at grade 9 (or earlier until universalisation is realised). Present curricula structures are based on completion of 12 grades of schooling and in preparation for higher education. Mathematics delivered to students in grades 1 to 9 will, in the future, have to be based on the needs of life and the workplace, and in preparation for using modern technology. Teachers will have to be oriented to a new philosophy for mathematics in basic education.

**Technology, Science & Mathematics Think Tank.** Government will facilitate and support the establishment of a public sector-private think tank to brainstorm Cambodia's core needs in technology, mathematics and science in general education, the priorities and phasing of changes, and the training strategies to be implemented by the new programme. The Think Tank will represent the interests of the private and public sectors in terms of manpower needs, the social development sector, and the education and training sector, and will determine the broad policy directions. Policies thus developed will guide investment related to these areas, including investments in the training of teachers pre-service and in-service, the re-training of teacher trainers in these subjects as well as other areas such as examinations and textbooks development.

In summary, the main policy directions are:

- Technology, Mathematics, and Science curricula in general education will be re-designed to suit the needs of the country and its people, and will be delivered to the entire school population

- Environmental sensitivity training will be infused into appropriate subjects of the curriculum of general education, and teachers will be trained in appropriate methodologies for raising environmental awareness
- The public and private sectors will collaborate in defining broad policies and content of programmes in Technology, Mathematics and Science in general education
- Selected specialist mathematics, science and technology master teachers from TTCs and secondary schools will be retrained consistent with the policy developments
- Pre-service teacher training programmes will be radically reformed to reflect the new policy directions for these three areas, and the TTC courses refined and instructional materials developed to reflect these new directions (and to reflect the parallel reforms in related textbooks for grades 1 to 12).
- Provision to selected schools of necessary and sufficient equipment and consumables to carry out practical science and technology requirements of the revised curriculum

## 2.12 Gender equity: policy directions

*Towards gender equity.* Government is committed to achieving greater gender equity. Teaching services (teacher trainees, teachers in service, teacher trainers, school administrators) continue to show a preponderance of males, particularly in higher profile positions. The *1996-97 Educational Indicators* demonstrate that currently there is overall female participation rate of 36% in teaching staff country-wide, but less than female 30% participation in secondary institutions.

MOEYS will utilise an 'affirmative action' approach in selection procedures for trainees for all programmes to begin addressing the gender disparity issue. Potential strategies to be appraised include:

- differentials in selection procedures to favour female applicants
- improved residential facilities for female trainees
- special financial incentives for female trainees

- indicative quotas for filling vacancies, promotions, etc., favouring females

All future MOEYS plans and projections will include the gender dimension. Draft master plans for Teacher Training, English Language Teacher Training, and Science and Mathematics will be revised to analyse the present gender balance and make plan for greater equity in the longer term. All teaching service development activities will be pro-active in achieving greater gender balance at all levels of teaching services in the medium to long term.

In summary, the main policy directions are :

- Reduction in gender disparities in all levels of the teaching services in the medium to long term
- Affirmative action approaches to be taken in short term to favour women in selection or appointment procedures, and actively recruit women for areas in which the gender balance is particularly inequitable
- Inclusion of gender analysis in all MOEYS policies, strategies and plans to ensure consistency with gender disparity reduction policy.

### 2.13 Non-Khmer speaking minorities: policy directions

***Ethno-linguistic minorities.*** While the majority of the country's population, inclusive of some minority peoples, speak Khmer as their first language, there are several significant minorities, particularly in the border areas, whose first language is not Khmer. It is estimated that 5% to 8% of Cambodia's population have a first language other than Khmer. The 1998 Census will provide MOEYS data on school age children by mother tongue.

The priorities of the 'emergency re-construction period' (1990-95) did not permit for the study of the minorities and equity considerations with regard to the provision of basic education and further educational opportunities. MOEYS signaled its intention to consider such issues in 1997 with the commissioning of a preliminary report on education in minority areas (expected in May 1997). A MOEYS Task Force is to be established to work toward a *Master Plan for Ethnic Minority Areas*. MOEYS will begin to address the major issue of facilitating the transition from first language to Khmer in the primary classroom.

Currently, all new textbooks are produced only in Khmer (see *Textbook Master Plan*) and no provision is made in the teacher training curriculum of the formal pre-service

programmes or the in-service upgrading programmes for teachers faced with children whose language is other than Khmer (nor for teachers whose first language is not Khmer). PASEC testing has found indications of lower performance in standardised tests by teachers in ethnic minority areas (whose own first language is not Khmer).

**Transition strategies** Neighbouring countries (eg.. Viet Nam, Thailand and Laos) are developing strategies and training teachers to effectively deal with the transition at grades 1 and 2 from first language (mother tongue) to the national language, including the development of initial instructional materials in the first languages. MOEYS will study the strategies used by these and other countries in addressing the issue, and note lessons learnt. UNESCO is currently supporting a small pilot project for the development of literacy materials in mother tongue languages for two minority peoples in Rattanakiri.

Government policy in this area has still to be formulated and in-depth analysis of the situation, of strategies, and of lessons learnt from other countries will precede policy definition. There will be implications for teacher training whatever the outcomes: teachers destined for service in areas where languages other than Khmer are dominant will have to be trained in strategies to achieve the language transition. It may be appropriate to identify one or more of the training institutions ( RTTC or PTTC) to take a lead role in preparing teachers for minority area service, and invest heavily in building the capacity of the institution's staff for that purpose. The entry requirements to TTC for recruits from the minority language areas may be relaxed.

Indicatively, a policy study on minorities education will be conducted in 1997, policies and strategies formulated in 1998, and new training programmes initiated in 1999. The scope, target population and intensity of such programmes are dependent however on the outcome of the studies and inter-related policy dialogue.

In summary, the main policy directions are :

- Non-Khmer language issues will be studied and policies formulated
- Strategies will be developed to ensure equal educational opportunities are afforded to non-Khmer speaking Cambodians, particularly to assist in the transition in primary schooling from first language to the national language.

## 2.14 Indicative list of policy studies required

**The policy studies approach.** MOEYS has identified a number a in-depth policy

studies necessary in order to formulate policies in a number of areas which have implications for the development of teaching services. These have been alluded to in this section of the strategic plan. The studies required are summarised here. Although listed as separate studies, some may be combined into broader studies, others may be incorporated into other studies which only partially relate to teaching services. MOEYS views their implementation as vital to the process of formulating or re-formulating policy to guide investments in the future and build a sustainable and effective service for delivering quality educational programmes.

MOEYS will discuss the phasing and implementation of the studies required with its international partners. Some studies may be assisted with resources already made available to MOEYS for the purpose (eg.. under CAPE's ABEL2, or under the UNESCO/UNDP-assisted *Capacity Building Project*). Resources to assist the conduct of other studies will be sought from other sources. Key to all studies will be (i) the building of Cambodian capacity to conduct policy studies, and (ii) the inclusion of a well defined policy formulation strategy within the study design.

*Indicative policy studies required, 1997-98.*

<i>Focus</i>	<i>Study</i>	<i>Indicative phasing</i>
Teacher forecasting methodology	Development of a teacher supply-demand forecasting model for Cambodia, with district, provincial and national capabilities, utilising MOEYS MIS inclusive of EMIS, 1998 Population Census, HR MIS and GIS, capable of 5 year projections, revised annually with updated inputs	1998-99 (incorporating 1998 Census data base), with PACU/EMIS & DOP
Teacher remuneration	Teacher income and expenditure study, inclusive of non-salary income, review of options for increasing real income, and policy dialogue	1998 Policy Study (with DOF)
Teaching double shifts	Educational, economic and social consequences of utilising teaching personnel for two shifts per day. Review of shift models. Review of international experience. Policy dialogue and policy formulation.	1997 Policy Study (with GED)
Teacher Redeployment	Analysis of over-supply and under-supply in educational institutions (all levels) and education support services. Staffing problems of urban, rural & remote schools. Lessons learnt from Cambodian and international re-deployment strategies. Policy dialogue and policy formulation.	1997 Policy Study (with DOP)



Teaching Services Development Strategic Plan: Draft

Teacher Training programmes	Teacher training programmes (pre-service, in-service & working teacher) analysed in content and methodology in relation to reformed school curricula, and target group capabilities. Different working teacher models utilised over the last 10 years will be comparatively evaluated for effectiveness. Policy recommendations, policy formulation.	1998 Policy Study (with TTD and FOP)
Foreign Language supply & demand	Comparative demand for English & French language instruction, grade 5 to 12; Language teacher wastage rates; Other foreign languages in schools; Foreign Languages implementation and teacher training master plan	1998 Policy Study and Strategic Plan (with TTD & CFL, RUPP)
Teaching Service Gender & Vulnerable Groups issues	Female disparities in all levels of teaching services, inclusive of trainee recruitment. Gender bias. Main streaming of vulnerable and disadvantaged groups. Policy options and dialogue.	1997 Policy Study (with DOP)
Basic education in non-Khmer communities	Students entering grade 1 with first language other than Khmer: comparative repetition, promotion, drop-out analysis. Language transition analysis. Policy options & dialogue	1998 Policy Study (with PEOs of selected provinces)
National Literacy Development	Analysis of literacy situation nationally from 1998 Census data. Geographical interventions modeled. Training delivery options reviewed and piloted. Policy dialogue. Policies for 2000-05 formulated.	1998-99 Policy Study and Strategic Plan (PACU and NFE)
Pre-school education	Needs assessments (schooling and teacher training to 2005). Models of private sector/public sector shared intervention developed and costed. Policy dialogue and formulation.	1999 Policy Study (NPSTTC with PACU)
Technology, Science & Mathematics	Brainstorm core needs in area for the future Cambodia workforce, etc. to determine curriculum, teacher training & investment priorities	1998 Think Tank with public sector-private sector joint participation
School-based Quality development support	Analysis of role of PEOs and DEOs in quality improvement at school level. Models for reform developed and tested. Model offices, roles and outputs defined through dialogue .	1998 Institutional Reform Study (with GED)
Supervisory Services Policy Study	Role and structure of the Supervisory Services, including comparisons with other countries' systems in the analysis	Policy Study 1997-98

# 3

## TEACHER TRAINING PROGRAMMES: DEVELOPMENT PRIORITIES & STRATEGIES

## **TEACHER TRAINING PROGRAMMES: DEVELOPMENT PRIORITIES AND STRATEGIES**

### **3.1 Government's Broad Policy for Teacher Education development**

**Critical reform issues.** Government's broad policy is to radically reform the formal teacher education delivery system in the short to medium term, ensuring readiness for an efficient output of qualified professionals for the country's teaching services in the 21st century. Critical issues to be addressed are (i) institutional weaknesses reflected in the under-utilisation of facilities and resources, (ii) programmes which are unresponsive to projected classroom requirements, (iii) insufficient breadth of responsibility vested in TTCs for teaching services development, (iv) inadequate quality in programme delivery, and (v) inadequate matching of demand and supply.

As Government's priority focus shifts from upgrading the quality of the existing teaching force to the preparation of the next generation of teachers to replace retirees and cope with the demands of enrollment expansion, investment priority will shift in the short term to the reform of the delivery system.

**The broad policy directions guiding investments will be:**

- divestment of responsibility for institutional and programme management to TTC
- reform of curricula and instructional materials for all TTC programmes
- broadened role of the TTC as teaching services hub within for a designated province or region
- improvement of physical facilities to match new programme needs
- enhancement of capacity of TTC personnel to deliver quality programmes
- reformulation of the role of the Pre-school Teachers TTC
- strengthened role of TTC in planning, monitoring and evaluation
- revitalisation of Faculty of Pedagogy's role in teaching services development

For some areas, while indicative policy directions have been identified by the Government, further studies are planned coupled with a policy dialogue process, in order to refine and define detailed policy directions, and flesh out strategies and investment priorities. An indicative list of policy studies required is presented at the end of this section.

### 3.2 TTC institutional strengthening

***Devolution of responsibility to the TTCs.*** In order to improve the efficiency and effectiveness of the TTC system, Government will progressively increase the responsibility of individual TTC for programming and recruitment of students, with TTD and the PEOs assuming coordination, monitoring and quality control roles. One of TTD's coordinating functions will be to ensure that trained teacher output nation-wide is consistent with overall demand projections.

***Maximising output from dedicated TTC resources.*** The institutional distinction between Provincial TTCs and Regional TTCs (based on the delivery of primary or lower secondary teacher training respectively) will be diminished in the short term. Each TTC will, in the short to medium term, begin to deliver a mix of services each year, responding to national, provincial and local needs. The 17 PTTCs and 6 RTTCs will be referred to as TTCs, each college developing its own programme in consultation with TTD. By 2000, Government anticipates that each TTC will have also developed an area of specialisation in addition to its broad responsibilities for general primary and/or lower secondary teacher trainee output.

Government will divest responsibility, for ensuring maximum returns from physical plant and personnel resources allocated to a TTC, to the institution's director and internal management committee. MOEYS will audit the physical capacity of all TTCs, and their staff complements and determine annual minimum targets for utilisation and staff output. In the two provincial capitals where RTTC and PTTC are presently co-located, MOEYS will determine how best the two institutions should be managed for maximum efficiency. Institutions with a record of under-enrolment and under-achievement will be required to plan how to rapidly redress the situation, as RGC is committed to efficient use of public resources.

***Programme diversification.*** The functions of a TTC will be diversified to cater for the full range of teaching service development needs of a province (or designated region). Formal programming will be expanded to include levels of teacher trainee not previously admitted (eg... selected TTCs may begin pre-school training programmes, TVET trainers training, bachelors programmes at a distance in collaboration with RUPP, etc). TTC work programmes will also include the management, implementation and

quality assurance roles with respect to in-service teacher training activities for the working teacher in the locality.

Government policy, therefore, is to facilitate TTCs in becoming its hubs of teacher development activities in a province, and a centre of resources - both human and physical - for teachers of all levels to draw upon. TTCs will also become centres for distance education activities, linked with the RUPP, the proposed University of Angkor, and with foreign tertiary institutions.

These policy direction will yield efficiency benefits, by minimising duplication of effort in teaching service development activities, and optimising the use of resources dedicated to TTCs.

***Strategic Training Alliance for TVET.*** As part of the programme diversification process, Government anticipates a lead role for TTCs in alliance with local private sector interests, and in collaboration with the NTB and OTVET, in the delivery and accreditation of TVET trainers. Moreover, when technical and vocational subjects are, in the medium to longer term, introduced into general secondary education, TTCs will extend the training 'alliance' concept to the preparation of secondary teachers in required subjects (including the work-place training focus referred to in Section 2 of this plan).

Linked with the introduction of TVET programmes will be the establishment of training-related entrepreneurial activity on TTC campuses, involving TVET - and general education trainees on a volunteer basis - in establishing profitable small enterprises (with capital in the form of physical space) contributed by the institution. While enterprises will be established primarily for training purposes, they will also enable TTCs to generate income from previously under-utilised land or facilities.

***Collaboration with private sector training providers.*** While teacher development services will always be prioritised, TTCs will also diversify services to meet other provincial demands in post secondary education, such as language training, management training, and other specialised post secondary training, utilising space and facilities for this purpose in evenings and holidays when teacher training programmes are in recess.

The form of collaboration with private sector interests will range from TTC delivery of a partner institution's course, to TTC provision only of facilities for an externally managed course. Government's views the distribution of TTCs around the country as providing a ready-made network of facilities for post-secondary revitalisation, providing a precursor to the re-establishment of tertiary education opportunities in provincial centres. Government policy directions for TTCs encourages income generation from appropriate activities. It is anticipated that most of the new programmes to be initiated within TTC

campuses will be not merely self-financing but will provide an income for TTC development and staff support.

***Development of financial autonomy.*** A phased plan will be prepared for financial autonomy for each TTC. Budgeting and accounting procedures will be developed, staff trained, auditing procedures established, and TTCs gradually given responsibility for financial operations, with the institutions annual budget based on public sector subventions and income generated from a range of sources.

As a first step, TTCs will establish and maintain special accounts for managing income generated, building on PASEC experience in managing small grants for institutional improvements. In the medium term, the financial control will extend to annual grants allocated by the Government. TTCs will also be charged with responsibility for identifying and negotiating capital investment for facilities or personnel enhancement within a financial framework established by MOEYS.

***Support for student welfare.*** TTC administration, in concert with an elected student representatives, will plan for the support of student welfare. On this basis, TTCs will make funding proposals to MOEYS for resources required, building on PASEC-supported experience on approaches in improving the living conditions of students. Plans will reflect co-financing approaches by TTCs, accessing provincial-level funds or income generated.

***Distance education capacity.*** In the short to medium term, distance learning programmes will be introduced in TTCs. Government will commission a *Study on Distance Education*, including the feasibility of linking all TTCs, TTD, and the Faculty of Pedagogy by inter-active audio and (in the longer term) video tele-conferencing facilities to provide cost-effective tutorial support distance learning programmes. Distance education will enable more specialised programmes to be offered nationally through a number of provincial sites at selected TTCs, reducing the need for Phnom Penh-based training. The tele-conferencing system will also enable Masters-level programmes to be gradually introduced to the provinces, and keep senior education personnel in their provincial responsibilities whilst they study part time. On the administrative front, the tele-conferencing facilities will also enable TTD communication with TTCs, and vice versa, for planning and monitoring purposes.

***TTC Leadership Capacity development.*** In order to ensure that all TTCs have the managerial capacity to implement effectively the innovations planned, Government will invest in the development of a strong leadership cadre across these institutions. What is required is a management team in each TTC which is pro-active in realising the institution's potential as a centre of teacher development services and other post secondary training.

Included in capacity development will be (i) the re-formulation of roles and linkages between TTCs, TTD, and PEOs, (ii) the formulation of revised role description for the institutions, job descriptions for senior appointees, and development of the concept and role of senior management teams, (iii) the appointment of management teams in all TTCs charged with new job descriptions and clear performance criteria, and (iv) the provision of purpose-designed training for managers on the change process to be implemented in teacher training institutions.

TTC directors will be assessed collaboratively by TTD and the respective PEO. A director will be assessed according to well defined criteria. Criteria will include personnel management capabilities, quality of programmes implemented, democratisation progress, maintenance of TTC property and sanitation facilities, and his own personal well being and foreign language capability. A mission statement will be developed (*Le Statut*), together with a job description for the position of director, and the evaluation will in the near future be made more precise. Directors who do not meet the minimum performance levels will have to vacate their positions. New appointees will have to be experienced teachers and have experience in school management prior to confirmation.

The audit of existing TTC management staff and the design and implementation of a TTC management training programme are priority activities for the short term.

***TTC teachers status and remuneration.*** Government policy is to raise the status and remuneration of qualified and accredited TTC teachers commensurate with the premier educational position the institutions are planned to take in each the province. MOEYS will not approve the appointment of new lecturers who do not meet the minimum criteria; sound teaching experience will be high on the list of requirements. Basic salaries will be supplemented with bonuses for TTC responsibilities, and overtime rates set competitively with market rates earned by trained UPP graduates for extra lessons. Because of their responsibilities, younger qualified TTC lecturers will be prioritised for higher educational opportunities (to Masters and Doctoral levels) with awards tied to continuing service in teacher education on return.

***Addressing gender and ethnic minority under-representation in TTC staffing.*** MOEYS will take affirmative action to address the under-representation of women and ethnic minorities in TTC positions. Targets will be set for reducing the gender imbalance to zero by 2002, and special consideration will be given to female applicants in capacity building programming in appointments and in promotion. One half of the TTC principals will be female by 2002. Ethnic minority representation will also be fostered, particularly in TTCs where teaching ethnic minority children approaches are to be developed. In the long run, it anticipated that these policies will increase TTC output of female and ethnic minority trainees, and benefit the quality of schooling for students in both groups.

**To summarise the key policy directions for TTC institutional strengthening:**

- TTCs will assume prime responsibility for programming and maximally utilising resources dedicated
- TTC programming will be diversified and be more responsive to provincial and specialised training needs
- Collaboration with private sector training service providers will be encouraged
- TTCs will be linked together for specialised training delivery by modern telecommunications technology
- Financial autonomy will be gradually assumed by individual TTCs
- TTC management capacity will be enhanced through a programme of capacity building activities designed to ensure that Government's policy directions are implemented
- Through training opportunities and remuneration incentives, TTC teaching positions will become the most sought-after in the public system.

### **3.3 TTC Programmes: Quality Enhancement**

*Toward international standards.* Government policy is to raise TTC-delivered programmes to regional/international standards. Already, Government has raised general admission requirements to grade 12 graduation standard. The medium term goal is to ensure that the appropriateness and quality of the teacher education programmes match the quality intake.

MOEYS will review and reform the two initial training programmes for the primary and lower secondary levels (a) to ensure that broad programme content addresses future personnel needs consistent with the sectoral reforms being pursued, (b) to ensure that the reformed programmes can withstand the test of comparison with initial training programmes of other selected countries, and (c) to ensure that programmes are cost-effective and efficient, delivered over the shortest period feasible. With regard to the latter, the possibility of the reduction in programme length will be reviewed to increase TTC throughput in the medium to long term.

A three-prong inter-connected strategy will be used to enhance the quality of formal



teacher education programmes in the short to medium term:

- 1 programme reform
- 2 course materials publication
- 3 training for TTC teachers

**Programming reform.** The programme review and reform work will be accomplished in the short term through a *Teacher Training Programmes Study*. The study, and reformed programme structures which emerge, will provide the micro-policy directions for subsequent investment in curriculum design, instructional materials design, and trainer re-training.

The reform of the broad training programmes will take into account the need for a more flexible structures to enable special issues to be addressed wherein the admission criteria and/or the programme components are modified. Special programmes may be developed under the leadership of TTD for delivery in several TTCs, or proposed by an individual college for 'local' delivery in response to special needs identified.

Examples of special programmes already identified by MOEYS for future delivery are:

- a Primary teacher training for *Minority Language areas* (for ethnic minority teachers specially recruited, with emphasis on the development of bi-lingual pupils through literacy transition strategies from mother tongue to Khmer)
- b Primary teacher training for *Remote Schools* (for teachers specially recruited from remote areas, with an emphasis on multi-grade teaching strategies for small schools)
- c Primary *English Language* specialists (as peripatetic teachers of English in grades 5 & 6).

**Admission requirements flexibility.** Although Government's general policy is to raise admission requirements for teacher training and university programmes to grade 12 *baccalaureate*, an element of flexibility will be introduced for special targets groups, including disadvantaged group, in the short to medium term. Special admission requirements, sometimes more rigorous, sometimes less so, than for the general programmes, will be established according to the educational profiles of the potential pools of recruits and the *raison d'être* of the individual special programme.

Special admission requirements will, for example, be established to attract ethnic minority students into teachers training programmes to return to their own communities (presently most non-Khmer speaking children are taught by Khmer teachers who do not know the mother tongues of their pupils). Special admission requirements will be also be considered to enable the ratio of female trainees to be improved.

***Instructional materials development.*** Government will invest in the development of instructional materials for teacher trainees in all programmes. Lessons learnt from materials developed since 1990 will be carefully reviewed, inclusive of open learning in-service materials, textbooks orientation materials, and the preliminary reference materials for TTC trainees produced with PASEC support in 1996-97.

By 2001, new textbooks or other forms of instructional packages, will have been published for every course (subject) of the major training programmes, general and specialised.

Government places high priority on investment in TTC textbooks. Training needs projections for the medium to long term indicate sustainable sizeable 'markets' for teacher training textbooks. The instructional materials programme will be closely linked with the training programme envisaged for TTC teachers as the third 'prong' of the quality enhancement policy.

***Training of TTC lecturers.*** All TTC teaching personnel in service in 2001 will have received in-depth training in the new TTC programme, related instructional materials published, developments in their subject at primary and lower secondary level, teaching methodology for TTC trainees, teaching practice methodology, testing & evaluation, etc. Training programmes will be specially designed for each TTC specialisation. Training investment will be focussed on specialists in post or experienced qualified classroom teachers to be transferred to TTC positions.

Training investment will be focussed on qualified post-holders expected to be in service until 2005. Trainees successfully completing the training programme will receive certification which will, in turn, be the basis for pay incentives. After the initial system-wide training, an annual induction programme will be established for training and accreditation of new appointees to TTC positions.

**To summarise the key policy directions for TTC programmes quality enhancement:**

- TTCs programmes will be reformed to international standards and to fully provide for the needs of the reformed basic education system
- Programmes and entry requirements will be modified to address societal issues including ethnic and gender disparities
- Textbooks and other instructional packages will be published for each TTC course (subject)
- All TTC teachers will be trained and accredited.

### 3.4 Institutionlisation of TTC role in working teacher capacity enhancement

**From 'ad hoc' role to hub.** Government policy is that the strengthened TTC will be the hub for activities and projects concerned with improving the instructional capabilities of classroom teachers. Although NGO and donor-assisted teaching enhancement programmes are currently variously located in either dedicated project facilities or selected TTCs or selected PEOs and DEO, Government policy is for the local TTC to provide key planning, management, implementation and monitoring inputs in all provincial activities. Instead of an ad hoc role for selected projects, the TTC (in collaboration with the PEO) will be given oversight responsibility for all working teacher training projects in the province. The symbiotic relationship envisioned between TTC and project will benefit both partners and ensure greater effectiveness and sustainability.

Among planned programmes in which TTCs will play key roles are:

- in-service in-school (and in-cluster) training of working teachers in pedagogy and content, by direct or distance methodologies
- the *Special Accreditation Programme* planned for untrained and under-qualified teachers
- in-service textbook orientation course delivery
- in-service foreign language (English) teacher training for primary teachers
- in-service training of primary school principals

TTCs will buy in (overtime) services from skilled personnel in other positions to assist in in-service programme delivery, inclusive of *maitres formateur*, inspectors and supervisors with PEO/DEO or in school level positions.

In the longer term, when major external investments in working teacher training have diminished, the TTCs lead role in needs assessment, project design and implementation for focussed working teacher enhancement will be sustained. Close linkages in the short to medium term (through current national projects) will build the capacity in TTCs for the future.

**TTC presence in 'remote' provinces.** For the six provinces currently without a TTC

(and possibly others when the number of TTCs is rationalised), MOEYS will facilitate the establishment of a TTC 'presence'. The most accessible TTC to the remote province concerned will be charged with responsibility for establishing a presence. The presence may be physically based in a secondary institution, a PEO or a provincial resource centre, and will be staffed only on the basis of programme implementation requirements. The presence will serve not only to facilitate the TTC role in remote provinces, but also in the recruitment and training of student teachers from (and returning to) remote and ethnic minority areas. In the medium to long term, each TTC 'centre' in remote provinces will be linked with its 'mother' TTC, and other TTCs in the system, by means of the distance delivery technology expected to be put in place.

**To summarise the key policy directions related to the TTC role in-service in-school training:**

- The TTC system will play a central role in the implementation of all in-service in-school training programmes
- TTC presence will be established cost-effectively in provinces in which no colleges are located
- TTC staff will be supplemented with other skilled teacher or principal trainers from other MOEYS units or schools.

### **3.5 TTC facilities enhancement**

***Programme-related facilities improvement.*** Investment in improving a TTC's physical infrastructure, and for enhancing facilities and equipment, will be determined by the institution's future role and programming. Each TTC will produce an individualised action plan for the short and medium term, compare projected facility needs with current provisions, and prioritise future needs. Government will appraise TTC projections and priorities and approve plans for the enhancement of TTC facilities. Agreed improvements will be financed through income generation schemes, non-governmental grants and loans, and Government capital allocations.

Government policy for future investment in TTCs is that it will be demand-driven and needs-based, replacing the centralised decision-making and allocation processes which have characterised the sub-sector. EU's 1997-98 programme for the refurbishment of 16 TTCs (which includes a comprehensive appraisal of current facilities) will be the last investment of this genre. TTCs will have, in future, to justify all investments through an analysis of costs and benefits over the medium term, based upon its projected work plan and outputs.

TTCs will be charged with the responsibility for seeking financing or co-financing for capital development - and even for disposables - from sources other than Government revenues. Final approval for all projects and plans, budget or non-budget, will however remain vested in the central MOEYS which will continue to hold responsibility for efficient coordination and utilisation of investments across the entire sector.

Building TTCs capacity to undertake the planning and management of physical resources has commenced on a limited scale under a PASEC intervention to raise TTC quality. Broadening capabilities in this area will be a priority in the training of the TTC management teams. Income generation models will be a key element in the training.

**To summarise the key policy directions related to revitalisation of TTC plant and facilities:**

- Individual TTCs will prepare facilities improvement plans based on needs of medium term programming projections
- TTCs will finance facilities enhancement through income generation, grants and loans from private sector or international sources, in addition to government sources.

### 3.6 Development of TTC role as centre of innovation and change

**Role focussing.** MOEYS policy is for TTCs to become the centres of pedagogical innovation and models for change, while the MOEYS administrative structure at central, provincial and district levels focuses on the efficiency, effectiveness and equity issues in the delivery of educational services nation-wide. Teaching service development at the provincial level will therefore be centred on the TTC, and associated TTC centers in remote provinces. Nevertheless, in a context of limited capacity, resources (both personnel and non-personnel) will be shared as needs warrant. TTCs will draw on MOEYS staff as training resources, and MOEYS will draw upon TTC personnel in support of its professional services.

**Model schools.** MOEYS will ensure that model primary and lower secondary schools (*Ecoles d' Application*) are associated with each TTC. These schools will be used for practical teaching experience for trainees, and developed into a showpiece institutions - models for trainees to aspire to replicate when appointed to a school. A symbiotic relationship between a TTC and its model schools will be encouraged, with TTC effort marshaled to enhance the model school's quality of education. Other developmental resources will be focussed on the model/practice schools, including science laboratory improvement and foreign language teaching. The TTC/model school

relationship will facilitate the demonstration of innovatory practices to trainees, both pre- and in-service.

**Model clusters.** Each TTCs will also be associated with a model school cluster, and ensure the effective development of the cluster as a key co-operative strategy in quality enhancement. The MOEYS School Cluster Committee will identify an appropriate cluster with each TTC, and facilitate the development of relationships that are mutually beneficial. Government intends that the CAPE project will facilitate the development of model clusters linked with TTCs as one of its sustainability strategies.

**Multi-grade teaching demonstration centres.** MOEYS will expand experimentation with effective multi-grade teaching approaches to all provinces, building on the experience of the Takeo PEO. A study will be undertaken of multi-grade practice nation-wide, together with the results of local and international experience, and a policy dialogue process fostered to determine investments in this key area (particularly for remote schools with small enrollments or teacher under-supply). It is anticipated that as an outcome of the study, a multi-grade experimental/demonstration school will be established in each province, linked with the TTC. Multi-grade approaches will be incorporated into the TTC primary training curriculum, and student teachers exposed to methodologies through site visits to the demonstration school.

**Resource centres.** TTCs will develop resource centres for use by teachers and trainees of the province. Normally it will be co-located with the TTC. TTC 'centres' in remote provinces will also function as resource centres. MOEYS will support the refurbishing of these centres and the transfer and consolidation of appropriate resources from other centres in the locality (PEOs, NGO centres, etc).

**To summarise the key policy directions related to linking TTC with models of good practice:**

- Each TTC will work alongside at least one school and one school cluster in developing models of good practice for demonstration and practice teaching purposes
- Each TTC and associated centres in remote provinces will develop a resource centre centrally located for teaching services development.

### **3.7 National Pre-school TTC role reform**

**Role re-definition.** The anticipated demand-driven expansion of pre-school services, financed by communities, private sector investors and Cambodian and

international NGOs, necessitates a review by Government of its role and responsibilities with regard to pre-schooling. A study and master plan activity is a priority.

The role of the NPSTTC will emerge through this process. Indicatively, its role will change considerably. Probable directions are:

- (a) shifting direct training activities to the training of trainers and needs-based training of PEO and DEO staff on the evaluation and licencing of pre-school,
- (b) providing a lead role in curriculum and materials development for pre-school education, in partnership with NGOs,
- (c) exploring and promoting effective pre-school models adapted to the Cambodian environment,
- (d) liaising with selected TTCs on the provision of training for pre-school teachers and administrators, and assuring the quality of such programmes, and
- (e) encouraging and facilitating private sector and community-based investments and services in the pre-school sector.

Investment in infrastructure, facilities and capacity building for the NPSTTC will be determined by Government policy for the development of the sub-sector, and the role of the dedicated unit of MOEYS.

**Definitive policy directions for pre-school teacher training will be formulated through a study and master plan exercise**

### 3.8 TTD strengthening

**Quality assurance role.** As Government policy for TTCs to take increased responsibility for institutional development, planning, programming and financing, TTD's role focus on administrative concerns will diminish. Examinations. Its key responsibilities will shift to quality assurance in several areas: curriculum, materials, instruction, assessment. One focus will be on the quality of inputs and outputs in the teacher training process.

An audit of TTD personnel will be undertaken and the department's new mission clarified. Staff needs for its new mission will be defined. An action plan for TTD development, inclusive of physical needs and training needs related to the new functions and structures will developed.

**TTC Examination management.** In the short to medium term, TTD's capacity in examinations will be enhanced, in collaboration with the Examinations Section of GED, as it is strengthened under the 1997-2003 AusAID-supported CANEP project. TTD will in the short term rationalise its TTC selection mechanisms, drawing on data from the

grade 12 examination system (on academic performance) and focussing on personality suitably for the teaching profession in its own procedures. In the long term, TTD will consider shifting responsibility for managing terminal examinations to GED, as that section is strengthened, focussing its attention on the quality of the examination papers and the interpretation and utilisation of results.

**Research role.** TTD will also assume a lead role in research activities related to teaching services development, and will be involved in the design and implementation of several of the studies required and listed in this master plan. In addition to the policy-dialogue focussed research studies, TTD will have a continuing monitoring role in relation to the effectiveness of training programmes implemented through the TTCs, and will establish a research programme for this purpose. Trainees will be compared pre and post training programmes, different training modalities will be compared (eg.... Cluster school teacher enhancement versus distance materials/maitres formateur approaches; student-centred versus traditional, etc). An ambitious proposal for TTD engagement in research activities was made by J Ratnaikie in 1995; TTD will review this proposal and determine which areas of research endeavor are practicable in the short, medium and long terms.

TTC capacity to plan and lead such research will be built both through on-the-job counterpart training and through attachments to institutions with similar activities within ASEAN. Selected TTD staff will be provided opportunities for academic research programmes.

**Policy development role.** TTD will be a key source of policy advice for Government on the development of the teaching services, working with other developments (eg.... DOP, GED, PACU) in formulating policy positions. Its quality assurance and research roles will feed into its policy advisory role. In addition, key staff members will receive policy training and be involved with partner agencies in policy studies, providing capacity enhancement both theoretically and through policy development processes.

**Project implementation role.** TTD will be a key actor in all projects which have a component related to teaching services development. The actual role in project implementation will vary from project to project, from implementing agency, to counterpart agency, to representation on technical or steering committees, or to involvement in project design, project appraisal, contacting services or project monitoring. The role of TTD in each project will be negotiated by PMMU and will depend on its purpose and implementation modalities. Government will, however, place technical responsibility on TTD for monitoring the effective implementation of all investments in teaching services development.

Currently agreed projects in which TTD will have a responsibility for advising Government on effective and efficient utilisation of investments are CAPE



CONSORTIUM (1996-2001), PASEC (1994-1997), EU EPP TTC Facilities re-furbishment (1997-98), CAMSET 1 & 2 (1994-2001), and aspects of UNICEF, Redd Barna, ADB Textbooks, ADB Basic Skills, AusAID Examinations, and several NGO teacher training activities. Several new projects are anticipated in the short to medium term, inclusive of an PREBAC, an EU project to follow on PASEC, and a JICA project in Mathematics and Science Teacher Training.

In order to carry out its responsibilities effectively for contributing to the implementation or monitoring the implementation of projects for teaching services development, TTD's capacity will be strengthened through project resources and through counter-parting with project managers. Each project design will ensure appropriate interface with, and if necessary, training and material support for TTD, to enable it to fully implement its role.

***TTD personnel & facilities enhancement.*** In order to effectively undertake the roles and responsibilities entrusted to TTD by Government, TTD facilities will be improved over the short to medium term. Core facilities will be enhanced to enable all tasks to be effectively implemented, while project-related facilities will be provided through the project design as needs will fluctuate according to the project portfolio and the actual role of TTD in each project. The staff complement of TTD will also fluctuate with its project portfolio. A detailed *TTD Development Plan* will be developed, consistent with this *Strategic Plan* and the *Teacher Training Master Plan*, to detail the department's development needs on a phased basis in the medium term, and projecting the sources of the inputs. Financing the development plan will be shared among the beneficiaries of TTD services, and TTD will be pro-active in seeking grant co-financing for facilities and capacity development within the context of its MOEYS-approved plan, subject to PMMU consultation.

**Policy directions for TTD facilities and personnel development will be formulated consistent with teaching service development policies and strategies. Among the directions anticipated are:**

- strengthened role in quality assurance of inputs and outputs of the TTC system
- lead role in research on the effectiveness of teaching services development modalities
- key advisory role on teaching service development policy
- project management role with regard to national or localised projects focussed on teacher training

- TTD facilities will be improved consistent with its projected roles and a TTD Development Plan will be prepared

### 3.9 RUPP & Faculty of Pedagogy programme strengthening

**Revitalisation of Higher Education** Government's *Higher Education Task Force* has been charged with the task of charting the way forward at the tertiary level of education. Its final report to be submitted to the Council of Ministers in May 1997 gives an agreed agenda for further developments. For the development of teaching services, MOEYS has two major issues to be addressed with urgency: (i) the structure of the bachelor degree for students destined to enter the teaching services, and (ii) the revitalisation of the Faculty of Pedagogy.

**Bachelor degree programmes.** In line with MOEYS policy of reducing the number of discrete subjects in the secondary curriculum, degree programmes for prospective teachers will be revised to provide a broader coverage of two or three disciplines. Science graduates will be expected to cover several 'subject' areas (eg. physics, chemistry, biology), Social Science graduates will be able to cover history, geography and civics, etc. The broader curriculum will not only facilitate more efficient utilisation of teachers with an institution, but also enable deployment policies to be effected.

**Faculty of Pedagogy strengthening.** It is anticipated that the Faculty of Pedagogy will be re-integrated into the Royal University of Phnom Penh as a first step and develop new programmes in Education to train the leadership cadre. Currently the faculty delivers the post-bachelor degree diploma in teaching, for graduates of RUPP, but the programme quality is not presently guaranteed by the Royal University. Policy directions unfolding point to the return of faculties, including Pedagogy, to academic standards, and the development of new programmes to provide for the growing demands of the education sector.

**Masters in Education.** MOEYS anticipates that one of the first Masters Degree programmes to be mounted by RUPP will be in Educational Administration, delivered on a part-time basis to prospective education sector leaders. The programme will be related to Cambodian experience and needs, but also reflect international research and comparisons. The initial programme may be in partnership with a foreign university, but any collaboration will ensure the rapid transition to RUPP FOP staff and include on-the-job staff training. Capacity building will be central to any collaborative delivery; the second cohort of students will be trained by Cambodian and locally-based staff, although relationships with foreign universities will be maintained for quality assurance purposes.

**Other programme development.** In the medium term, the Faculty will have to develop Certificate, Diploma and Bachelors programmes, building on the ad hoc training programmes developed and delivered with donor assistance since 1994 (ADB, France, UNDP/UNESCO, EU, etc). The Faculty will review the contents and instructional materials of courses developed in recent years, and use these to assist in the formulation of regular sustainable programmes of academic quality delivered by Cambodian faculty. The transition from donor activity in the FOP compound, to FOP activity built on donor interventions will need project support, as will the re-orientation of selected faculty members to deliver the new programmes.

Potentially, FOP will also play a strong role in improving the capacity of the Teacher Training institutions to upgrade their own programmes and deliver them effectively.

**Capacity building.** A FOP staff audit will be undertaken and related to programming needs over the medium to long term. Succession and training plans will be undertaken to ensure that faculty staffing is comparable with education faculties internationally within 6 to 8 years.

In summary, the main policy directions are :

- RUPP bachelor programmes for prospective teachers will be reformed to allow for broader, less specialised coverage
- Government anticipates that the Faculty of Pedagogy will reintegrate with the RUPP, develop a programme structure, and become the lead institution for the development of a leadership cadre for the education sector
- FOP's role will be extended to include the delivery of a range of programmes to improve the capabilities of TTC staff and the academic quality of their programmes.

### 3.10 Indicative list of policy studies required

**Policy studies related to the reform of the TTC system** MOEYS's broad policy directions for future of teacher training institutions have been formulated, but there are several areas which require further detailed study and dialogue:

Teaching Services Development Strategic Plan: Draft

<i>Focus</i>	<i>Study</i>	<i>Indicative phasing</i>
Distance education in teaching services development	Lessons learnt from DE in Cambodia and internationally; appraisal of telecommunications linkages (tele-conferencing, computer networking) across TTCs; demand for specialised DE programmes nation wide, etc.	1997-98 Policy Study
TTC Programmes	Review of existing PTTC, RTTC, FOP programmes, international comparison, needs assessment, dialogue on reform of programmes	1997-98 Programming Study
Multi-grade teaching	Review of Cambodian practice, problems, and experimentation, linked with international experience, and policy dialogue on further experimentation and promotion of concepts	1998-99 Policy Study
TTC Facilities	Mapping and appraisal of all TTC sites and basic refurbishing requirements	1997 Study (commissioned in connection with EU TTC Refurbishment Project)
Pre-schooling	Current practice, private sector role, community-based models, links with WID, public policy formulation, master plan for MOEYS investments	1998 Study
TTD Development	Detailed functions and activities of TTD to 2002, job descriptions and work plans, facilities and personnel requirements, training and facilities requirements, phasing and costing, indicative financing sources	1997-98 Development Plan