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Public Health Education

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EXECUTIVE SUMMARY

The need for strong public health systems is well recognized in the South-East Asia Region (SEAR) but these systems are in disarray in many countries. While the quality and knowledge of nationals of these countries are comparable to the best in the world, the health systems are in dire need of public health professionals with requisite leadership skills and attributes.

WHO's Regional Office for South-East Asia (SEARO) has undertaken a number of steps to address the issue beginning with the Calcutta Declaration adopted by the Regional Conference on Public health in South-East Asia in the 21st Century held in November 1999.

While the Declaration called for promoting public health as a discipline, and recognized the leadership role of public health, the reform of public health education and training was seen as the key to the reform of public health systems. Although country-specific actions are required to strengthen public health systems, they can also gain by mutual exchange of experiences, expertise and resources.

A Strategic Advisory Group met in New Delhi in November 2004 to formulate a framework of Public Health Education based on a review of the current situation. The Group recognized that there are few public health professionals in positions of power and there is an over-medicalization of the health system – both in the public and private sectors.

Unless statutory and regulatory requirements of formally trained public health professionals in public health positions are in place, the situation is unlikely to improve. Furthermore, the educators in public health have isolated themselves from the communities and the health services. A strategic framework is needed to reform the education of PH professionals in countries of the Region.

This paper should be read in conjunction with the Framework of South-East Asia Public Health Initiative, 2004-2008¹, and the Report of the First Meeting of the Strategic Advisory Group held in WHO/SEARO from 1-2 November 2004.²

¹ Document SEA-HSD-278

² Document SEA-HSD-279

Highlighting the current situation in the countries, the paper touches on the inadequate information available on public health training institutes and the requirements of PH professionals. These lead to a set of proposed actions to commission workforce studies to obtain more robust information on which to base future actions.

The paper then describes the concept of Essential Public Health Functions, their use in the evaluation of public health systems, the concepts behind accreditation of the Schools of Public Health based on self-assessment and peer review, and the concepts of benchmarking which allow comparisons among institutions.

These sections lead to calls for setting up evaluation and monitoring systems that enable continual review of the relevance and performance of the institutions and learning from the best practices in other institutions. These actions also allows one to develop evidence-based public health policies and helps to close the gap between knowledge and practice.

The third set of sections deal with the infrastructure of the Schools or Institutes of Public Health. Sections XI and XII deal with the analysis of policies and identification of leverage points in the policy making process, partnerships or coalitions to influence policies, and to have public health recognized as a distinct discipline.

The paper also touches on the governance structure of the schools and highlights some of the pitfalls. Finally, a plea is made to WHO to collaborate with individual institutions and countries to develop individual resource mobilization proposals - to be collected together as a Regional proposal.

The actions proposed should show some effect within 18 months and a second meeting of the SAG can be convened in about two years to review the progress and suggest ways to overcome obstacles. The whole process needs the proactive involvement not only of WHO but also the SEAPHEIN – the network of institutions, and, of course, the institutions themselves.

1. INTRODUCTION

With over 1.5 billion people, the 11 Member States of WHO's South-East Asia Region (SEAR) are home to about 25% of the world's population. The Region also bears the major share of the global burden of disease as well as gross inequities in the health status of its people. In view of persistent problems in health development, the importance of strengthening public health cannot be overemphasized. While the Region contains advanced health training facilities comparable to any in the world, access to them and their effectiveness in reaching all are limited. Large public health institutions established decades ago also need to be revived and reactivated. Recognizing this, the WHO Regional Office for South-East Asia (SEARO) has initiated several steps towards improving public health in countries of the Region.

A Regional Conference on "Public Health in South-East Asia in the 21st century" in 1999 led to the Calcutta Declaration³ on the development of public health. The Declaration laid out four major strategic directions:

- (1) Promote public health as **a discipline and as an essential requirement for health development** in the Region. In addition to addressing the challenges posed by ill-health and promoting positive health, public health should also address issues related to poverty, equity, ethics, quality, social justice, environment, community development and globalization;
- (2) Recognize the **leadership role** of public health in formulating and implementing evidence-based healthy public policies; creating supporting environments; enhancing social responsibility by involving communities, and increasing the allocation of human and financial resources;
- (3) Strengthen public health by **creating career structures** at national, state, provincial and district levels and by establishing policies to mandate competent background and relevant expertise for persons responsible for the health of populations, and

³ WHO/SEARO: "Public Health in South-East Asia in the 21st Century", Report and Recommendations of the Regional Conference, Calcutta, 22-24 Nov 1999, SEA-HSD-235, May 2000.

- (4) Strengthen and reform public health **education and training, and research**, as supported by the networking of institutions and the use of information technology, for improving human resources development.

Since the Regional Conference, several follow-up activities have been carried out – meetings and consultations on Accreditation Guidelines (Chennai, 30 Jan–1 Feb 2002), Networking (New Delhi, 11-14 Feb 2003), Future Directions (New Delhi, 8-11 Dec 2003), Network Forum (Bangkok, 5-8 April 2004), etc. The WHO Regional Director for South-East Asia, Dr. Samlee Plianbangchang, while endorsing many of the conclusions and recommendations formulated earlier, had stated that among many of the things that needed to be done, there is an urgent need to develop public health education appropriate to the needs and developments of the countries in the Region⁴.

This paper proposes a strategy to initiate revival of public health education – a framework to launch the fourth strategic direction of the Calcutta Declaration.

The strengthening of the whole public health area needs a multi-pronged approach to achieve all major strategic directions outlined in the Calcutta Declaration. The lack of leadership in public health is the most profound shortcoming in the countries and the gradual building up of a cadre of leaders and managers in public health will work towards achieving desired goals. It may be useful to recapitulate what the US Institute of Medicine (IOM) committee on public health specified as the six major responsibilities of Schools of Public Health:

- (1) educate the educators, practitioners and researchers and also to prepare public health leaders and managers;
- (2) serve as a focal point for multi-school trans-disciplinary research to improve the health of the public;
- (3) contribute to public health policies;
- (4) work collaboratively with other professional schools to assure quality public health content in their programmes;

⁴ WHO/SEARO; "Future Directions in Public Health – Calcutta and Beyond" Report of an Informal Consultation, New Delhi, 8-11 Dec 2003, SEA-HMD-217, Feb 2004.

- (5) assure access to life-long learning for the public health workforce; and engage actively with various communities to improve the public's health.

It is clear that educating future public health leaders is essential to fulfilling all the strategic directions specified in the Calcutta Declaration. This will enable attention to be concentrated on an achievable focus of efforts by both countries and WHO, instead of dissipating it in a wide spectrum of activities. It is a phased approach and does not imply that the other directions are ignored.

This paper supplements and complements the areas already covered in the South-East Asia Public Health Initiative, 2004-2008⁵ and the Report of the first Meeting of the Strategic Advisory Group⁶.

2. A FEW DEFINITIONS

Public health has been defined in various ways. Winslow (1923) defined public health as the "science and art of preventing disease, prolonging life, and promoting health and efficiency, through organized community effort for the sanitation of the environment, control of communicable infections, education of the individual in personal hygiene, organization of medical and nursing services for the early diagnosis and preventive treatment."⁷ It has been modified and somewhat expanded by others.

A committee appointed by the US Institute of Medicine to look into public health in the 21st century defined the mission of public health as "fulfilling society's interest in assuring conditions in which people can be healthier."⁸

The American Society of Public Health defined public health as "involving a population-focused, organized effort to help individuals, groups and communities reduce health risks, and maintain or improve health status."⁹

⁵ WHO/SEARO; "South-East Asia Public Health Initiative, 2004-2008", SEA-HSD-278, December 2004

⁶ WHO/SEARO; "South-East Asia Public Health Initiative, 2004-2008, Report of the First Meeting of the Strategic Advisory Group, SEARO, 1-2 November 2004", SEA-HSD-279, February 2004

⁷ Uton Muchtar Rafei, RD/SEARO, Keynote address to the Calcutta Conference 1999

⁸ US Institute of Medicine (1988), "Future of Public Health"

⁹ US IOM (2003) "Who will keep the Public Healthy: Public health education in the 21st century"

The Association of Schools of Public Health stated that "public health carries out its mission through organized, interdisciplinary efforts that address the physical, mental and environmental health concerns of communities and populations at risk for disease and injury. Its mission is achieved through the application of health promotion and disease prevention technologies and interventions designed to improve and enhance quality of life. Health promotion and disease prevention technologies encompass a broad array of functions and expertise, including the three core public health functions:

- assessment and monitoring of the health of communities, and populations at risk to identify health problems and priorities;
- formulating public policies, in collaboration with community and government leaders, designed to solve identified local and national health problems and priorities;
- assuring that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services, and evaluation of the effectiveness of that care".

The other question that arises is, who is a public health worker or professional? A majority of health workers, in addition to their curative or clinical work, also perform some public health functions. However, we must distinguish between those who perform some public health functions and those who are primarily public health workers.

Only a small portion of the total public health workforce receives any formal public health education and those who do, do so primarily through certificate programmes, short courses, conferences, or workshops offered by a variety of institutions and organizations.

As the IOM study (2003) states, "a public health professional is a person educated in public health or a related discipline who is employed to improve health through a population focus."

For the purpose of this paper, public health professionals are "those health or health-related people with the bachelors, masters and doctoral degrees and capable of filling many professional positions, within public health and positions of senior responsibility and leadership in public health practice, research and teaching."

This will also include those already in senior positions but who may need short courses for acquiring new skills or as a part of continuing education. Other categories of public health workforce will be considered later.

Thus, a public health worker is “a person trained in the practice of public health tasks as his/her major preoccupation; public health workers include a wide variety of health workers e.g. community health worker, family health worker, immunization worker, public health inspector, etc.”

A public health professional is a public health worker who has also been trained to a postgraduate level, i.e. beyond a degree level, and has conceptual skills used in planning, implementing and evaluating public health projects; such a person can solve complex public health problems e.g. health impact assessment of environmental projects, planning a health promotion campaign against obesity in children, etc.

Public health professionals can also be persons who have achieved bachelor's degrees or equivalent, possess leadership potential, come from a wide range of disciplines and can transcend their disciplinary background. The background disciplines may be medical, nursing, dentistry, social work, pharmacy, law, public administration, engineering, environmental sciences, biology, microbiology, allied health professions, etc.

The education to be offered will be multidisciplinary, a combination of supervised practice opportunities with teaching, undertaking community-based participatory research, and a solid grounding in ethics and values necessary for a primary health care approach.

3. CURRENT ISSUES IN PUBLIC HEALTH IN SOUTH-EAST ASIA

It is widely recognized that public health services and the institutions involved in public health training in the Region are underperforming, if not largely dysfunctional. The public health programmes that were strong a few decades ago are relatively weak now or suffering from funding and human resource problems. The underperformance is more apparent in view of the current complex health challenges like:

- new, emerging and re-emerging diseases (from AIDS to Avian influenza);

- global warming and environmental degradation including polluted water supply;
- increasing occurrence and severity of natural and man-made disasters; and
- deliberate use of biological, chemical and radiological agents.

The causes of underperformance have been reiterated many times and include:

- outputs from public health programmes are less visible or are long-term;
- obsessions with quick solutions for political opportunistic gains;
- lack of political will including the lack of public health professionals in leadership positions and positions of power;
- lack of "brand" recognition or a well-recognized discipline of public health;
- profession is not lucrative enough compared to medicine or business;
- lack of integration between service and education leading to disconnections between the two;
- advent of the private sector and relinquishing responsibilities by governments in areas of public health; and
- progressive assignment of relatively low values to the profession, etc.

The Calcutta Declaration had highlighted the four strategic directions in order to rectify some of these shortcomings of public health. The recognition of public health as a discipline, its leadership role and the need to create a career structure are all essential requirements for public health to flourish.

4. MODEL OF EDUCATION AND TRAINING IN PUBLIC HEALTH

Institutions responsible for training in public health, usually known as Schools of Public Health, attract students from a pool of candidates through a

selection process which presently highlights academic achievement, and with relatively little emphasis on the attitudes or motivations of potential students.

Public health professionals are a separate breed from other types of health workers in that they must be involved in population-based activities and attuned to the needs of the community. If statutory requirements exist for public health professionals to possess formal qualification, they act as incentives for the profession and attract more students to the pool.

The Schools of Public Health (SPH) themselves act as "sinks" or "black boxes" that transform raw students into finished products or professionals. The schools need large inputs from different sources – governments for the lion's share of the funding, tuition and other resources, faculty – both full-time and part-time, and demonstration and service areas where both the faculty and the students can be involved in services. In addition, community-based research is one of the main activities of the schools in which both students and faculty participate.

The PHSs influence and/or are influenced by the government and non-governmental sector policies on health, and contribute to the evolution of the effectiveness of the public health systems. The complexities of public health programmes are best conveyed to the students through appropriate teaching/learning materials based on case studies. The faculty must be involved in the actual running of health services in selected geographic or functional areas. The capacity of the schools should depend on the projections of requirements for public health professionals and their current and future supply.

The job market is principally in the public sector – whether local, regional, municipal or national levels. The delineation of levels depends on the structure of the public organizations in the country and where the responsibility for public health lies.

The non-governmental sector, especially civil societies are becoming active in the health and health-related development fields and will provide a substantial job market. In addition, the private sector is progressively becoming involved – the nature of their involvement depends on the marketing skills of public health professionals and the perceived needs for their services. For instance, private foundations may become involved in

water supply schemes in health promotion or in the provision of care for HIV/AIDS patients.

Schools of public health are at the centre of public health actions – from influencing policies to creating job markets for its graduates. The involvement of the schools will be elaborated later. The paper will deal with:

- (1) Estimating requirements and supply of public health professionals;
- (2) Accreditation and benchmarking which play a dominant role in improving the quality of education;
- (3) Strategic considerations to improve the curricula and strengthen faculties;
- (4) Ways to form partnerships and influence public health policies; and,
- (5) The role of WHO in strengthening schools of public health in the Region.

5. CURRENT PUBLIC HEALTH INSTITUTIONS (PHI)

The accreditation guidelines developed by education experts of the Region¹⁰ and the regional overview of public health institutions¹¹ presented elsewhere contain a listing of current PHIs in countries and their accreditation practices.

PHIs are described as “those institutions that provide education and training to current and future health workers (at all levels) who focus predominantly on the health of the population; have curricula that are mainly geared to dealing with community aspects of health care, etc.” Thus, PHIs include a variety of institutions with widely divergent entry requirements (e.g. from high school graduation to M.B.B.S.), periods of training (1 or 2 weeks to 5 years), with or without accreditation.

¹⁰ WHO/SEARO “Accreditation Guidelines for Education/Training Institutions and Programmes in Public Health”, SEA-HMD-213, Sep 2002 pp 8 to16

¹¹ Jayawickramarajah, P. “Regional Overview”, paper presented at the First Meeting of SAG, SEARO, New Delhi, 1-2 Nov 2004

There is also a serious lack of appropriate public health training institutions for professionals in the Region. The quantitative details can be found in the "Regional Overview" presented at the SAG Meeting in November 2004, and other papers. Some qualitative conclusions may be worth repeating.

At present, the exact yearly intake or graduating numbers from these Institutes are not easily available. The Regional Directory of Training Institutions, maintained at WHO SEARO Website (<http://www.who.sea.org/tdti>) provides an interactive platform for exchange of information between the governments, host institutions, faculties, trainers and trainees alike to meet the needs of education and training in the health and health-related areas, and accordingly to set a format for information exchange. Some data on public health institutions with detailed profiles are available which will directly serve to set standards and criteria in various specialties and training in medical, public and allied health areas. The directory also serves as a user-friendly online compendium of training institutions, programmes, and facilities that can be used for decision-making or in framing the criteria for selection of candidates, identification of appropriate specialized areas and institutes. It also facilitates faculty exchange and forges increasing partnerships between experts and institutions cross-cutting the other considerations in the true spirit of Technical Cooperation among Countries (TCAC) of the Region.

In India, Shiv Lal and Venkatesh¹² reported that some 80 medical colleges have post-graduate courses in Community Medicine or Preventive and Social Medicine with an annual intake of about 180 students and a total capacity to admit about 100 students with various degrees for MPH or equivalent degree and about 200 students with MBBS qualification. Moreover, two new SPHs are being considered which will augment the capacity. The recently established Achutha Menon Centre of Health Sciences in Trivandrum receives students from many disciplines for the MPH course, and the Indian Institute of Health and Management Research (IIHMR) in Jaipur is running various short and long-term health management training courses, including Graduate and PG in hospital management.

¹² Lal, Shiv and Venkatesh, S. "Training in Public Health in India – prospects and Challenges", paper presented to national consultation on Institutes of Public Health in India, 16-17 Sep 2004, New Delhi

In his paper¹³, Dr. N.S. Deodhar, the former Director of the All India Institute of Public Health and Hygiene in Calcutta for a number of years, graphically described the regression of public health education suffered in India in the last three decades. "The subject of hygiene and public health has been dropped from the undergraduate medical curriculum. Departments of Preventive and Social Medicine have been the victims of neglect, assignment of lowest priority, low prestige, poor quality of staff, inadequate facilities the staff fully insulate(d) themselves from the practice of public health and even of preventive medicine." He continued "...a major blunder was the integration of medical and public health departments". It appears that while over 240 medical colleges have opened in the last 55 years, the number of public health institutes established was almost negligible. After the 7th Five Year Plan recommended opening six Schools of Public Health, there has been no concrete action on implementation.

India does not have any statutory requirement for formal training in public health for employment as public health professionals. Although public health diplomas or degrees are encouraged, the senior officials in charge of public health programmes are, almost wholly, medical graduates with little public health training. This tends to militate against establishing public health as a discipline and against attracting the best students for careers in public health.

The lack of appropriate education institutions for public health is manifest in the inadequate planning and implementation of major programmes such as HIV/AIDS or TB control programmes. The lack of status of public health professionals is also obvious in the weak professional association of public health, lack of a distinct accreditation body or procedures for Schools of Public Health, and lack of continuing research to look into public health problems. Despite this, there are increasing demands for certain categories of professionals such as hospital administrators and food hygiene specialists to which a large number of students are being attracted.

In order to redress this situation, recent government initiatives were aimed at establishing at least two world class Public Health Schools to provide quality training in public health. As an immediate action towards the fulfillment of that objective, it is planned to establish two schools under the management of the Indian Council of Medical Research (ICMR) and the National Institute of Epidemiology.

¹³ Deodhar, N.S., (2004); Public Health System in India with Special Reference to Schools of Public Health, National Consultation on Schools of Public Health; New Delhi, Sep 2004

In Bangladesh, the National Institute of Preventive and Social Medicine (NIPSOM) admits 154 students every year, and three other institutions have some elements of PH education – Dhaka, Mymensingh and Rajshahi Medical Colleges. Three private PH institutions have recently been established – 1) a branch of the University of Newcastle (UNC); 2) the State University of Bangladesh and 3) the BRAC/James P Grant School. In addition, a few universities/institutions offer distance education and are planning to respond rapidly if circumstances so favour.

Indonesia started its graduate and post-graduate PH education, with the establishment of the Faculty of Public Health (FPH), as part of the University of Indonesia in the late 1970s. The country's PH education developed progressively with four new FPHs within a decade. In the late 1990s and early 2000, the Indonesian government introduced a statutory requirement of district and health centre medical officers to have formal training in public health. Similarly, reforms in higher education took place with more autonomy being given to Universities. This led to the proliferation of PHIs in Indonesia. By 2004, around 40 new private PHIs, either as separate faculties within a university or as a separate school attached within the faculty of medicine, had been established. However, there is a lack of a common standard in post-graduate education, and there is an urgent need for quality control through an appropriate accreditation mechanism. Currently, because of the economic situation in Indonesia, it is difficult to employ public health professionals in all public facilities. The demands from the private sector, however, are increasing. As in India, the increasing demands are from thriving private sector enterprises like hospitals, food industries and hotels; but not for community based programmes.

Thailand seems to be relatively more advanced in public health education in the Region. While Mahidol and Chulalongkorn Universities have long-standing public health faculties, other institutions that train professionals related to public health are also becoming very active. Thailand has also set a statutory requirement for district health officers to be trained in public health, and accreditation procedures are also well advanced for the schools. Some of these schools have medium-term strategic plans and elicit information systematically from graduates and their employers. Thailand can provide technical collaboration and support to other countries as well as to other institutions in the Region.

The Thailand Public Health Education Institutes Network (THAIPHEIN), established in 1997, has 15 institutes as members. Learning from the

experience of THAIPHEIN, a regional consultation on accreditation guidelines for Educational and Training Institutes and Programmes in Public Health was held in Chennai, India, in 2002. The consultation recommended the establishment of a similar network for the Region to include all PH institutes. In April 2004, an international forum was held at Bangkok to lay out the strategic guidelines and plans of action to activate a South-East Asia Public Health Education Institutes Network (SEAPHEIN), which was formally launched at the same forum, with the Faculty of Public Health, Mahidol University, as the Secretariat.

The vision of SEAPHEIN is to be a collaborative network of public health education and training institutions within the South-East Asia Region, in order to strengthen public health capacity. Its mission is to collaborate among the institutions, WHO and other partners, and to improve and sustain the quality and relevance of public health education to address the increasing challenges of health development.

The "Regional Overview" has proposed the upgrading or creation of institutes for degree programmes in public health in countries with less than a million population like Bhutan and Maldives; and the establishment of a few public health institutes in countries with up to 80 million population. A larger number of institutes may be necessary in countries with populations greater than 100 million (like Bangladesh or Indonesia) and India, with a population of over a billion, is a special case where progress in public health education is vital for progress in the Region.

Recommendation: In view of the lack of comprehensive information and in order to put future planning on a firm basis, it is essential to commission the collection of detailed information from all public health institutes.

6. STREAMLINING THE CATEGORIES OF PUBLIC HEALTH WORKERS

The WHO Report¹⁴ on "Accreditation Guidelines for Education/Training Institutions and Programmes in Public Health" listed a plethora of categories of degrees, diplomas and certificates awarded in various countries. For

¹⁴ SEA-HMD-213 *op cit*

example, in India, there is a degree in Social and Preventive Medicine (SPM), in Community Medicine (CM), Masters in Public Health (MPH), Masters in Community Health (MCh), Doctor of Medicine (MD) in Community Medicine, and many diplomas and their equivalent in Public Health, while each has separate education requirement and outcome. Similarly, there are Assistant Nurse Midwives undergoing two-years certificate courses, BSc or MSc in Public Health Nursing, and certificate courses for health supervisors. In Sri Lanka, the situation is more complicated since basic, post-basic and in-service training are imparted by the same school.

Although attention is at present restricted to Schools of Public Health and their graduates, it is also essential to streamline the training programmes of equivalent groups, even if they have different nomenclatures. The following categories of training programmes in public health have been proposed¹⁵:

- Post-basic and post-graduate training for public health professionals;
- Pre-service training for public health workers;
- Public health content in pre-service training of other health workers;
- In-service training of health workers;
- Continuing education of public health workers; and,
- Public health content in the training of workers in related sectors.

7. REQUIREMENTS FOR PUBLIC HEALTH PROFESSIONALS

Quantitative data are not available on public health workers' requirement. Many country reports usually emphasize that the requirements for public health cadres are large, and firm estimates are seldom provided. In order to estimate the requirements, it might be useful to review existing human resources plans or the annual reports of the Ministries of Health or other government generated annual statistics.

An approximate estimate for India was given during the national consultation on Public Health Institutes in India, held in New Delhi, in September, 2004. There, it was stated that the demand for public health

¹⁵ WHO, Interregional Meeting on New Challenges in Public Health, 1995, WHO/HRH/96.4

training was over 10 000 for the public sector, and around 5 000 for the NGO sector. In addition, some unclear norms were proposed for the current stock of PH professionals at different levels – e.g. 100 at the central level, 600 at State level, 3 000 at district levels and 10 000 at the block levels. Yearly needs were estimated at 20% of these numbers which leads to a very high figure. The annual output was estimated to be about 400 PH graduates. A working group for the 7th Five Year Plan of India had estimated that the number of public health managers required would be from 9 600 to 10 750 by 2000.

In recommending the opening of a School of Public Health in Myanmar, Abeykoon¹⁶ estimates the current requirement of PH professionals for Myanmar to be around 900-1000 trained professionals which may double in 10-15 years time. The estimates are based on data provided by various officials through interviews – this may be one of the best means to provide a quick and approximate projection of requirements. The requirements of other sectors can be added to these estimates.

In many countries, health care institutions run by charitable, private or public trusts (e.g. Tata Memorial Hospital or Rajiv Gandhi Foundation in India) also provide some public health services. In India, many NGOs (SEWA, Prayas, etc.) are engaged in operational activities either on their own or are authorized by state governments to provide health services. Finally, there are NGOs which coordinate activities (like VHAI or CEHAT also in India) and require a substantial number of PH professionals for their work.

Market tendencies can be assessed by analyzing surveys of graduates of the PHIs. For example, is there a demand for Public Health Professionals? Is there a surplus as reflected by un- or under-employment? The ministries of health often tend to overestimate the requirements and do not adequately take into account financial constraints. Regulations or laws are helpful in specifying the criteria of filling some of the posts or functions. However, it should be recognized that quick but approximate estimates are “more” valuable for decision- making purposes than long, costly but accurate information.

Many of the public health functions are currently being performed by workers who have had little or no formal training in public health. The need

¹⁶ Abeykoon, P., “Development of Public Health Education in Myanmar”, Assignment Report, SEA-HSD-276, July 2004, p16

for training is thus not only to bring the public health staff up to date and provide for new recruits but also to retrain the existing staff.

Recommendation: One of the first tasks of the South-East Asia Public Health Education Institutes Network (SEA PHEIN) would be to undertake a study for estimating the requirements of different types of PH workers including professionals in the Region.

8. ESSENTIAL PUBLIC HEALTH FUNCTIONS OR QUALITATIVE REQUIREMENTS

The essential public health functions (EPHF) concept originated from concerns about rapid changes in health and social environments in almost all countries and their resultant impact on health. WHO initiated a Delphi study to obtain an international consensus on the core features of EPHF. The results were summarized as a group of nine health categories including 37 public health functions¹⁷

Subsequently, PAHO refined the EPHF. This may provide an indication starting point of where emphasis should be placed in educating public health workers. The essential public health functions as defined by PAHO¹⁸ are:

- (1) Monitoring, evaluation and analysis of health status;
- (2) Public health surveillance, research and control of risks and threats to PH;
- (3) Health promotion;
- (4) Social participation in health;
- (5) Policies and institutional capacity to plan and manage PH;
- (6) Institutional capacity for regulation and enforcement in PH;
- (7) Equitable access to necessary health services;

¹⁷ Bettcher, D.W., S. Sapirie and E.T. Goon; "Essential Public Health Functions: results of an international Delphi study", World Health Statistical quarterly, 51, (1998)

¹⁸ PAHO: Public Health in the Americas, 2002

- (8) Human resources development and training in PH;
- (9) Quality assurance in health services;
- (10) Research in PH; and,
- (11) Reduction of the impact of emergencies and disasters on health including treatment of injuries.

The WHO Report on Accreditation Guidelines¹⁹ had listed the competencies required of health workers at different levels of PHC. Many of the requirements for district/provincial or regional levels are relevant for the curricula of SPHs. The content areas of the curriculum for a Masters in PH degree, based on required competencies, have been considered in WHO's Report on Networking of Public Health Institutions.²⁰ These two reports together provide useful background of the work.

The US IOM committee proposed that PH professional education should not only include the long-recognized, five core components of PH (i.e. epidemiology, biostatistics, environmental health, health services administration and social and behavioural science), but also encompass eight critical new areas such as informatics, genomics, communication, cultural competence, community-based participatory research, policy and law, global health, and ethics. While the content areas of the PH curriculum should be adapted to suit the conditions of the Region, the IOM committee provided a useful guideline for identification of competencies needed.

The design of the pedagogy for public health education is further complicated if one considers courses where learning is interspersed with continuing on a job. If serving senior public health professionals are to be retrained in public health principles, it may be advisable to design courses where they are periodically detached from their jobs for the requisite training – as is being done in Indonesia. Distance learning is already making some inroads in PH education in the Region and will become progressively more important. However, caution should be exercised in promoting distance learning which needs a fairly large effort in designing curricula and setting up supportive mechanisms.

¹⁹ SEA-HMD-213 *op cit* p16-26

²⁰ WHO SEARO, "Networking of Public Health Institutions", New Delhi, 11-14 Feb 2003, SEA-HSD-263, p15-21

A framework, based on EPHF, has been developed and used to analyze public health systems and further used to evaluate India's public health system.²¹

Recommendation: The design of a dynamic and relevant education programme will require the following six sets of actions:

- Curriculum design: strong linkage to the health system, tailored to the country's context, multidisciplinary approach, facility for specialization;
- Faculty: improvement of conditions of service, combination of academicians and practitioners, strong link with practice areas;
- Accreditation: ability to cater to domestic employment opportunities, preferably internationally recognized;
- Strong regional and international support: sustained support by the Regional Office, faculty exchange among countries, regular exchange with international curricula;
- Competent and motivated student entrants; and,
- Sufficient infrastructure e.g. libraries, computers, facilities for field work, etc.

9. ACCREDITATION

Accreditation has been defined as "the process by which an authorized agency or organization evaluates and recognizes an institution or an individual according to a set of standards describing the structure and processes that contribute to desirable outcomes"²². While licensing is usually mandatory and government-imposed, accreditation is voluntary and mostly administered by nongovernmental bodies. In higher education, it is the premier form of self-regulation and the primary means by which academia and the professions promote quality control. Accreditation exercises share some common features: a) agreed-upon criteria or standards that serve as the basis for evaluation; b) an analytical self-study; c) an on-site visit by external peer evaluators, and d) publication of results.

²¹ Das Gupta, M., & M. Rani, "India's Public Health system: how well does it function" World Bank Policy Research Working Paper 3447, Nov 2004

²² European Observatory on Health Systems and Policies, Glossaries, WHO/EURO

Since an improvement in the quality and appropriateness of education depends on an impartial evaluation based on self-analysis, accreditation provides the most potent means for the reorientation of public health education. The self-assessment process is one of the most important steps in the accreditation phase.

*Benchmarking*²³, as contrasted to accreditation, is "a process of measuring another organization's product or service according to specified standards in order to compare it with and improve one's own product or service". Comparison is the basis of benchmarking and involves "the search for best practices that will lead to superior performance". While one may balk at benchmarking due to its comparative nature, it will be dealt with greater detail later.

The association of Schools of Public Health in the European Region (ASPHER) assigns the utmost importance to the self assessment aspects of accreditation.²⁴ Self assessment will need a detailed project plan, methods to be employed, key issues to be addressed, responsibilities and time frame. The criteria for accreditation²⁵, according to ASPHER, should include:

- (1) Mission, goals and Objectives: a clearly formulated goal with supporting goals and objectives;
- (2) Organizational setting – external; the school should preferably be an integral part of an accredited institution of higher education;
- (3) Organizational setting – internal: which should be conducive to teaching and learning, research and service;
- (4) Governance: school administration and faculty should have defined rights and responsibilities;
- (5) Resources: the school should have adequate resources including financial, personnel, offices, classrooms, library facilities, laboratories, computer facilities, field experience sites and other community resources to facilitate partnerships;

²³ Hamalainen, K. et al., "Benchmarking in the Improvement of Higher Education: ENQA workshop report 2", European Network for Quality Assurance in Higher Education. 2002

²⁴ ASPHER: "Guidelines for Self-Assessment" 2001, <http://www.ensp.fr/aspher> .

²⁵ ASPHER, "Criteria for the Public health Education European Review, 2001, as above CEPH (Council on Education for Public health, "Accreditation Criteria", 2004, <http://www.ceph.org/gsph.htm>.

- (6) Instructional programmes: including curriculum or a series of planned and evaluated learning experiences, enabling students' understanding of the basic areas of knowledge, skills and experience to apply the concepts and demonstration of integration of knowledge through a culminating experience; {The expected competencies and learning objectives must be defined, and procedures for assessing them identified. The school should also pursue an active research programme directed at improving the practice of public health.}
- (7) Service: the school should pursue an active service programme for enabling faculty and students to contribute to public health practice;
- (8) Faculty: the school should have a clearly defined faculty with provisions for evaluating competence and performance, and opportunities for professional development;
- (9) Students: the school should have student recruitment and admissions policies to locate those with the right aptitude and motivation for a career in public health; there should also be an academic advising system and a career and placement advice system; and,
- (10) Evaluation and planning: the school should have an explicit process for evaluating and monitoring its efforts as well as an analytical self-evaluation process.

The external or peer review process could be based on regional or national associations of (or schools of) public health which can designate the review teams for comparing the actual achievements with the self assessments. Although the external process is vital to accreditation, the purpose is to identify shortcomings that can be redressed rather than a reward or punishment structure for meeting the criteria.

The accreditation bodies should not be under the aegis of associations of other disciplines like medicine since such a system will invariably lead to a growing bias towards the discipline of the parent body – or medicalization as in this case.

10. BENCHMARKING

Benchmarking as a higher education evaluation tool is being used more in recent years. In Europe, the interest in benchmarking is in the context of the Bologna process²⁶, which emphasizes the need for more comparison, transparency and visibility of quality of education. It is also considered in the context of growing competition among educational institutions (nationally and internationally) and their search for best practices and superior performance. Benchmarking has gained a large following in the business world where enterprises are often ranked, based on benchmarking criteria.

It is self-evident that any method adopted from the business world is most likely to be rejected by educational institutions. This was certainly the case during the meeting of the Strategic Advisory Group held in WHO SEARO in November 2004.²⁷ Predictably, there is quite a lot of criticism of ranking-oriented benchmarking. Part of the criticism is valid in the sense that ranking may not be compatible with the spirit of cooperation and discourse as well as lack of willingness to work with those institutions which rank towards the bottom. This was also evident in the controversy that was generated by ranking countries according to the assessment of health systems performance in the World Health Report 2000. Thus, benchmarking, however revealing, must be adopted with caution for its use in profiling the Schools of Public Health. There are two ways to proceed in this respect.

First, there can be three or four bands of rankings, from institutions of "very good" profile to those that "can be improved from various aspects". The individual rankings within the bands are not made public.

The second way is to "pair" up (or triple up) institutions by putting two or more of the institutions together where one which is relatively underperforming can learn from the experience of another well-functioning institution, using some criteria. For instance, one institution which has no placement office can learn from the best practices of another which has a smoothly functioning placement office. One institution which has a good number of faculty members and regular products of graduates in epidemiology, can also work with another institution which does not have

²⁶ Hamalainen, K. et al. *op cit* "Benchmarking in the Improvement of Higher Education: ENQA workshop report 2", European Network for Quality Assurance in Higher Education. 2002

²⁷ SEA-HSD-279 *op cit*

enough faculty for epidemiology. This mode of collaboration is non-threatening and does not necessarily put together institutions working under different value systems.

Another benchmarking approach is proposed for eliciting information that may enable mutual learning based on current best practices. It is assumed that comparative analysis is not currently undertaken whether on a confidential or publicized basis. Furthermore, some of the institutions may not systematically elicit feedback from their graduates or their employers. There are exceptions like PH institutions in Thailand which regularly collect information from their graduates and their employers. A questionnaire can be sent to the graduates asking them to rate their schools - on a rating scale of 1 to 10 - on aspects that are relevant and from the quality of teaching to the effectiveness of career placement services. Obviously, some of the graduates cannot be traced nor will all respond. Even if a 50% response can be considered, the results can be used for proper profiling.

The approach above can be combined with an approach taken by the Institutes of Medicine, USA, when they undertook a study of the needed public health education for the 21st century in 1999. A committee had administered the questionnaires to the Deans of the Schools of Public Health, as well as to the employers of their graduates. The questionnaires were based on the recommendations made earlier by another study of the IOM, in 1988.

One recommendation of the earlier study was that the Schools of PH should establish firm practice links with state/local public health agencies. Associated with this recommendation, the Deans were asked the following questions:

- Q. "Does the faculty undertake professional responsibilities in a state health department?" "If yes, in what areas? During the past twelve months, what percentage of the faculty engaged in such activity?"

The questions to the employers were more general.

- "Why would your Organization consider hiring someone with a PH education?" "What is the minimum knowledge you expect from someone with a PH education?"

The answers to these questions provided valuable insights into the desirable skills and competencies of future PH professionals.

An approach combining two of the above is being proposed (see Annex for sample questionnaires). Thus, the following steps could be considered:

- (1) Design model questionnaires for the Deans of Schools of PH or equivalent (e.g. Preventive and Social Medicine Departments under the Faculty of Medicines) based on recommendations of the Calcutta Declaration or equivalent.
- (2) Design model questionnaires for all agencies who have recruited graduates of schools of PH (Ministries of Health and national NGOs).
- (3) Design model questionnaires for a few samples of graduates of PH schools, especially those who are in high-level positions in the public or private sector; and decide on a sample size of graduates to whom such questionnaires should be administered; to obtain contact information of graduates from PH schools – preferably online contacts;
- (4) Contract an educational institution in the country to collect and analyze data;
- (5) Conduct surveys through the institution selected and obtain results; and,
- (6) Consider the results carefully and decide how to use them – either to provide bands of rankings or identify institutions which score high or low characteristic and put them together.

There are two possible ways to interpret the data. Firstly, through an analysis of the performance of all SPHs over a period of time. For instance, the average scores over time may indicate whether the schools are generally improving their performance. The second interpretation will be the relative ranking of the schools, as compared to one another. This exerts pressure on schools to perform better in view of their comparative performance.

The second set of concerns is related to the comparability of data from different countries and cultures. The “model” questionnaires will need to be adapted to suit the context of each country; a question culturally acceptable in one country may not be so in another. This also leads to the comparability of data from different countries. Some manipulation of data may be needed to make them somewhat comparable.

It is anticipated that the results of such a survey will exert a high positive inducement on the faculty members of SPHs to reorient their education to redress perceived weaknesses of their programmes and to better address the needs perceived by employers.

11. RECOGNITION OF PUBLIC HEALTH AS A DISCIPLINE

In many countries, while public health is recognized as part of the medical discipline and is also regarded as an important area, there is no statutory requirement to have a formal public health qualification for employment in the public health arena. The recognition of public health as a distinct and valuable multi-disciplinary profession is a political process. The Schools of Public Health can play a key role in influencing such processes.

The faculty should be involved in various community-based and national political processes where the future of public health programmes is discussed. For instance, the national consultation on institutes of public health in India in September 2004 provided such a forum for inputs – where public health professionals were invited to give their views.

Influencing public policies requires partnerships and coalition building with many groups and bodies – both governmental and from civil society. The results of such coalition building will not be immediately obvious but with persistence, a multi-disciplinary public health profession will be recognized by the political leadership.

Recommendation: The art of politics must become a part of the educational process and both faculty and students must become conversant with identification of influential actors, agenda setting, influencing decisions and creating coalitions.

Learning in politics is often best done through case studies of real examples of decisions made. Emphasis must be placed on learning through analysis of cases which reflect both the complexities of society as well as indicate ways to move forward.

12. PARTNERSHIPS

Many alternative institutions, both organized and informal, have been actively involved in public health work as well as public health capacity building.

Sometimes, they have been termed as alternative sectors. For example, in India, the following organizations, among others, have been active in public health education and training – some since the 1980s and others more recently:

- VHAI Educational Council (diploma in community health management);
- Network of community health trainers: with inputs from many voluntary organizations, they have conducted short courses in community health development and management;
- People's Health Movement;
- Society for Community Health Awareness, Research and Action (CHC): human resources development in Karnataka and Orissa;
- Centre for Enquiry into Health and Alternatives (CEHAT): gender issues, etc.

The list can be enriched by examples from other countries, as well as with more examples from India. These organizations have become active in public health development due to dissatisfaction with existing government-owned PH institutions, usually run by conventional Preventive and Social Medicine departments, and also having low status for public health and increasing inequity and social exclusion. A wave of community health NGO movements has taken place to try alternative experiments and actions, and to build capacity from communities and grassroot workers. Unless the national apex institutions or schools of public health recognize these alternative sectors as strong resources and involve them in training and research, a large portion of creative energy in public health will remain untapped.

The second category of institutions for partnership are the "development and training institutions" established by other sectors, with a major component of social development. For example, the Indian Institute of Management (IIM), Ahmedabad, includes rural poverty as one of the modules that the students have to take in order to expose them to the real conditions of India. Similarly, some components of public health would be a welcome addition to the curricula of these students. In addition, teachers and researchers from these institutions can be invited to give guest lectures to the students in other SPHs. Such active collaboration will demonstrate the validity

of the ecological or multisectoral basis of health development. Examples abound of institutions from different disciplines or sectors getting together to produce learning materials for students or to produce case studies to support such materials.

The third category of institutions belong to the private sector. Currently, private-public partnership is very much in vogue and PH education should also benefit from this concept. Many of the private sector companies are seeking to support selected social and health development activities (like Tata Institute of Social Science or IIHMR in India) and can perhaps be motivated to provide resources for the health needs of defined areas or populations. In the USA, private philanthropies have always been active in supporting educational institutions including SPHs. For example, Johns Hopkins SPH has been the beneficiary of such philanthropy not only from Hopkins but also from the Rockefeller Foundation. Although the SPHs in the Region have not been privy to such heritage from their own institutions, new enterprises probably would be willing to fund or support some activities including possibly funding some professorships in schools of PH. They maybe willing to establish endowed Chairs or Professorships which also give them visibility among social activists.

The concept of "twinning" is an attractive course of action and has been covered in the section on Benchmarking. The twinning of two institutions, or two associations, can yield many benefits of partnership to each other. Twinning can also be used to bring the weaker institutions at par in a short time since examples and involved commitment are important catalysts in institutional development.

Partnerships as described above deal with country linkages, while there are several bodies at the international level that promote and actively encourage partnerships and networks. Apart from SEAPHEIN, there are various networks, such as the International Network of Clinical Epidemiology (INCLIN), the Asia-Pacific Academic Consortium for Public Health (APACPH), Association of Schools of Public Health in the European Region (ASPHER), the American Public Health Association (APHA) and, the World Federation of Public health Associations (WFPHA), which are important resources to tap into. All of them have valuable web-sites for dissemination of information and knowledge.

13. GOVERNANCE AND MODELS OF SCHOOLS OF PUBLIC HEALTH

Two areas less scrutinized are the governance and models of the schools of public health (SPHs). There is now a growing body of evidence with regard to the different types of governance, e.g. sponsor-controlled (Mahidol University of Thailand or National Institute of Health and Family Welfare (NIHFW) of India), autonomous (IIHMR of Jaipur), or the Hybrid (IISC, Bangalore).

The sponsor-controlled institutions are characterized by all important decisions being taken by the sponsors – whether they are managed by the Ministry of Health or Education, – and funds are also provided by the sponsors. The autonomous institutions usually have governing bodies composed of representatives of stakeholders and sponsors, and these bodies are responsible for taking major decisions. The institute is provided funds by sponsors but can also raise funds. The hybrid institutions also possess governing boards or academic councils which take major decisions but the institute can take decisions regarding curricula, student admissions, etc.

The advantages of sponsor-controlled institutions lie in the ease with which objectives can be changed while there is less freedom for the other two. The presence of different stakeholders in autonomous institutions provides flexibility but delays decision making regarding objectives or major changes.

Three broad models were also considered at the national consultation in India in September 2004. There are single institutions like some SPHs in USA, or a grouping under a common umbrella like IIMs, or a network of schools like SEAPHEIN. While the first category can leverage brand names, like Johns Hopkins Bloomberg SPH, a grouping enables common standardized curricula and a coordinated placement process. All these models have their own advantages and shortcomings.

14. RESOURCE MOBILIZATION

All efforts to reorient PH education must be accompanied by a concomitant search for resources. Before extra resources are sought, it may be appropriate to establish a baseline of the costs and expenses of training and deployment of

PH professionals. This will give an idea of the magnitude of resources needed for the expansion of facilities or changes in their structure. At the simplest level, the annual budgeted figures of running a PHI can be divided by the number of students to obtain an average figure for costing purposes.

Some of the approaches to attract funds from internal sources have already been listed above. A systematic approach should be adopted by the network in conjunction with WHO, to approach all promising private donors or foundations. The donors may be more willing to fund SPHs in view of the inherent monitoring framework contained in the benchmarking process. Coherent proposals should be prepared for different potential donors – both internal and external. This could be the second major task for the network.

A regional portfolio of proposals has a greater chance of success in attracting funds. Donors are much more sensitive now about the needs of the Region and are probably willing to invest in preparedness to deal with natural and man-made disasters.

15. FUTURE ACTIONS TO STRENGTHEN SCHOOLS OF PUBLIC HEALTH

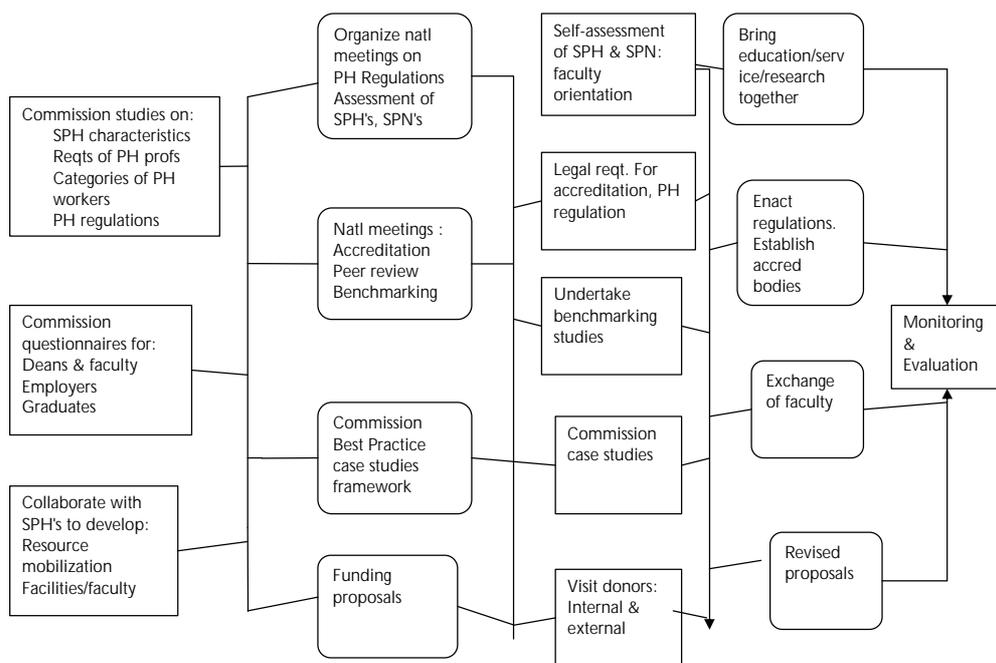
WHO SAG meeting held on 1-2 November 2004 proposed a set of recommendations on development of SPHs and the network - SEAPHEIN. It also highlighted the core areas for strengthening. These include:

- Development of evidence-based public health policies;
- Development of institutional capabilities for closing the gap between knowledge and practice;
- Development of appropriate human resources at all levels;
- Health promotion, healthy lifestyles with involvement of civil society;
- Strengthening of public health regulation and health financing;
- Community-based public health research; and
- Ability to solve complex societal problems through multi-disciplinary interventions.

The following figure provides a schematic diagram of future actions needed. It has been pointed out in chapters V and VII that the database for both the number and profile of SPHs and the future requirements of PH professionals is rather weak. An urgent task for WHO is to commission studies or collection of information from the SPH's regarding their characteristics, e.g:

- pool of students and their characteristics
- admission policies
- size and expertise of the faculty - both full-time and part-time
- visiting faculty
- facilities available including libraries, laboratories, service or demonstration areas
- resources consumed and their sources, etc

Figure: Actions to Strengthen Schools of Public Health



SEAPHEIN or one of the PH institutions from the network could be entrusted with the task of collecting and analyzing such information from individual institutions.

At the same time, information should also be collected regarding the future requirements of PH professionals. It is best done on an approximate basis by requesting projections from ministries of health/higher education and NGOs. One apex institution from each country could be entrusted with making a compendium existing public health legislations, in the country. These data would provide the basis for further analysis of public health policies and the changes needed.

In order to enrich the database for accreditation and benchmarking, questionnaires should be developed to elicit information from the schools, the employers of graduates and the graduates themselves. Sample questions are provided in Annex 2 as illustrative examples. These questionnaires need to be adapted for each country to reflect specific cultural and linguistic considerations. The consolidated answers would provide estimates of the gaps between knowledge and practice and the status of available PH professionals.

The next steps are oriented towards actions based on the evidence collected. In order to involve all stakeholders, this stage will manifest a number of focused national or subregional meetings to address the following issues:

- consensus on the public health regulatory framework needed to move the agenda forward
- assessment of schools of public health, their weaknesses and strengths
- assessment of the departments of preventive and social medicine in the various medical colleges and identification of ways to move them towards new concepts of public health
- national accreditation procedures for SPH's and creation/strengthening of appropriate accreditation bodies
- procedures to administer benchmarking questionnaires and their analysis.

There will also be a need to develop a set of papers on the contents of future public health curricula including recent and emerging public health problems. This can be done by commissioning different experts in the specific areas – both in the Region and outside the Region. Since it is proposed to extensively use case study methods for complex social and public health problems, expertise could also be sought from other academic institutions including social sciences, business and engineering. Research areas on these complex issues can be identified for further development.

Simultaneously, each institution should undertake an in-depth review based on self-assessment on its future requirements for resources, faculty development and creation of close connections between education, research and practice.

The self-assessments, involving faculty, students, representatives of employers or service providers, and possibly some graduates, can easily take six months or more. They will require the services of a well-motivated coordinator who can keep the process moving and on time.

The self-assessments serve multiple purposes – they contribute to future accreditation processes, provide insights into improvements needed and form the basis of medium-term strategic plans. Obviously, some institutions may already have embarked on such exercises and their experiences can be used by others.

During the review process, or towards their end, WHO Country Offices should collaborate with the institutions to develop proposals for attracting resources and funds. These proposals should be addressed to both internal and external sources.

The identification of internal sources can be one of the tasks of the self-assessment teams – and a variety of proposals to cater to diverse orientations of potential donors may be necessary. Development of funding proposals is probably one of the major weaknesses of the SPHs and will take some time to redress.

At the regional level, meetings may be necessary after 18 months or so, to develop regional accreditation procedures and bodies and, earlier, for regional funding proposals. SEAPHEIN can play a critical role in the regional activities as well as in supporting individual institutions in their self-assessment

studies, provision of regional expertise, and formulation of regional policies towards a public health regulatory framework. Furthermore, actual case studies can also be developed under the aegis of SEAPHEIN, with the involvement of individual institutions and faculty. It can facilitate the creation and maintenance of websites where various activities and their progress will be reported and to which all institutions can contribute.

In all these activities, certain basic principles should be followed. Public health education and research must be reoriented by means of:

- Rooting education in practical realities of field experience;
- Training teachers in modern pedagogical methods;
- Encouraging learning through use of case studies and analysis;
- Including e-learning and using information technology for self-learning;
- Strengthening community-based public health research for generating evidence for better public health practice;
- Providing for necessary support services e.g. libraries, laboratories, field area; and
- Orienting departments of preventive and social medicine towards experience-based public health practice.

The role of WHO SEARO will be to act as a catalyst, motivator and to monitor progress and provide support when necessary. This will require WHO to create core staff – through an internal working group or otherwise - which can call on outside expertise as needed. However, a fully dedicated, proactive staff member is essential for the success of the endeavour.

Annex

SAMPLE QUESTIONS FOR BENCHMARKING (SEE P18 OF THE PAPER)

Questions for Graduates:

- (1) Was your SPH education worth the cost?
- (2) How was the quality of teaching in core courses? In elective courses?
- (3) Were the faculty available for informal discussion?
- (4) Were the prominent academics involved in teaching?
- (5) How would you judge the education in providing you with ways of approaching problems
- (6) How was the responsiveness of the faculty and the administration to students' concerns and opinions?
- (7) How was the School's effort - in class or outside - to improve your leadership skills?
- (8) How do you judge the School's network and connections in placing you and helping you through your career?
- (9) How would you judge the school's performance in finding you a job and supporting your independent search for a job?
- (10) How would you judge the number, diversity and quality of agencies recruiting on campus or posting jobs?
- (11) How would you judge the School's efforts in the area of international public health? In the areas of health ethics?

Questionnaires for Employers (qualitative answers)

- (1) Why would you hire someone with a public health education?
- (2) What is the minimum knowledge you expect from someone with public health education?

- (3) What are the most important areas for education in public health?
- (4) What do you see as the strengths and challenges facing public health today?
- (5) What may be the changes in the next ten years which may require new skills/knowledge to be added to public health education?

Questionnaire for Deans of SPH

- (1) How many full or part-time staff?
- (2) Does the faculty undertake professional responsibilities in a health department?
- (3) If yes, check the type of work:
 - Research project
 - Technical assistance
 - Ongoing professional responsibilities
 - Staff development
 - Professional advisory committee
 - Other

During the past year for what % of time was the faculty engaged in such activity?

- (4) Can students earn credit for practice?
 - Are they required to?
 - What are the barriers to students doing actual service?
 - What % of time do students spend on service?
- (5) Does the faculty undertake professional responsibilities? If yes, what kind of work?
- (6) How important is practice-based activity experience in recruiting for School?
- (7) In your estimate, in which activities has the School been engaged during the past five years?
 - Policy development
 - Public health advocacy

- Research requested by policy makers
 - Public health workforce development
- (8) What do you see as barriers for being able to achieve the full potential of public health?
- (9) Where else can your students take courses?
- Medicine
 - Nursing
 - Dentistry
 - Health Sciences
 - Law
 - Economics and finance
 - Social work
- (10) In which other department has your faculty assisted?
- (11) Does your School offer the following courses?
- Cultural competencies
 - Ethics
 - Health disparities
 - Social justice
 - Human rights
 - International health
 - Social epidemiology
- (12) Does your School conduct an alumni survey?
- (13) Does your School conduct regular surveys of your faculty?