

environmental education as a project for developing an evaluation index system on campus sustainability. In 2003, the first workshop on Green University was held at National Kaohsiung Normal University. These were the milestones for initiation and development of campus sustainability in Taiwan.

As the government, industries, and citizens gave more and more concern on global warming and GHG reduction, carbon neutrality issues for universities caught the intention of MOE in the following years. On the World Environment Day in 2007, the minister of education declared that energy conservation would be one of the priorities in operation of higher education institutes. In late 2007, the first Green University project sponsored by the MOE was contracted. The administrative power in the higher education system firstly showed its critical role in promoting campus sustainability for universities.

The Green University Initiatives in Taiwan then took actions in promoting the concept and practices related to campus sustainability among universities. A Green University Committee under MOE was formed, which includes government officials of EPA and other agencies, university presidents, and scholars/experts. This committee offered guidelines on scoping and goal setting of the Green University project. In 2008, several university educators and ex-ministers of education were also interviewed for collecting ideas on how to promote the concept and implement action plans. Basically, both top-down and bottom-up strategies would be employed, and all aspects in terms of human ecology, including the environmental health of the campuses, the environmental management of the administrations, and environmental education for students.

In 2009, thirteen universities were selected as the first group of modeling green universities of Taiwan and twelve of them signed the Talloire Declaration. An evaluation system serving the administrative purposes of the MOE is also currently being developed based on the previous evaluation framework developed several years ago. It is anticipated that in several years more and more universities can be green and the triple bottom lines for sustainability, environmental, societal, and economical health will be taken into account in operation, maintenance, and development of the universities.

Symposium 3- Health, Peace and Harmony

SY3-01

Building Bridges for Peace in Conflict- The Vital Contribution of the Health Sector

Nigel Pearson

Freelance Consultant, but works with: UNICEF, UNHCR, UNFPA, DFID, Merlin, LSHTM, Oxford University and EC consultancies, UK

SY3-02

Taiwanese Experience of Public Health & Peace Work in Africa

Hou-Chaung Chen

Center of Health Action for New Global Equity, Taiwan

(More detail will be presented during the talk)

SY3-03

Capacity Building for Public Health Personnel from Thailand Perspectives

Phitaya Charupoonphol

Faculty of Public health, Mahidol University, Thailand

The health of all peoples is fundamental to the attainment of peace and world's security. The highest attainable standard of health is one of the fundamental rights of every human being, without distinction of race, religion, political belief, and economic or social condition. Since a few decades ago, key areas of communicable disease control, basic minimum needs, and primary health care have been focused with the collaboration between the Royal Thai Government and several organizations. In the 21st century, the ability to live harmoniously in a changing and challenging world is essential to all world population. Public health, focusing on health promotion and protection, has played a significant role as basic principles to strengthen people's happiness, harmonious relations, and world's security. In addition, workforce shortage has been globally recognized as a major mismatch between population needs and the available health workforce in terms of overall numbers, relevant training, practical competencies, and sufficient diversity (World Health Report 2006). Similar to other countries, capacity building for public health personnel is proposed in this paper as a lesson learnt from Thailand perspectives. In Thailand, King's philosophy of sufficient economy has been used to guide country development since the 10th national health plan. People are encouraged to help each other, strengthen the community, maintain unity, and develop a learning process that stems from a stable and strong foundation. In order to create sustainable benefits and to develop the nation's stability progressively, moderation, reasonableness, and self immunity are proposed as three main principles of sufficient economy.

Capacity building for Thai public health personnel have also been shifted to the improvement of a balance in the state of mind, social affairs, managing natural resources and the environment, as well as encouragement of the villagers' local wisdom and technology development. In Thailand, schools of public health, public health training centers, and other educational programs are encouraged to be more responsive to the recruitment and training needs of local public health agencies, particularly those in remote locations. Collaboration between relevant educational programs and local public health agencies are strengthened. International network in public health education has been developed to

improve and transform health care systems to meet world people's need. However, public health personnel need to be trained as strong, self-reliant, compassionate and flexible. Besides, one should possess a good conscience and place public interests on a higher priority, above one's own.

SY3-04

Is Peace Conducive to Quality Reproductive Health Services?

Harshalal R. Seneviratne

Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Colombo, Sri Lanka

Peace and harmony are much appreciated concepts of societal development while at a personal level good health is greatly valued. Globally peaceful times are intermingled with natural as well as man made disasters. While the impact of such disruptive events on the social, economic and health status of countries, regions and continents have been assumed and analyzed the influence of peace time on these indicators is unclear. This presentation attempts to further analyze the progress of reproductive health services in relation to the benefits provided by peace and focus on barriers if any towards achieving an ideal status.

For this analysis development of reproductive health services and the national and regional status of health in Sri Lanka are considered. Sri Lanka which has a population of 19.1 million has demonstrated very commendable achievements in its national reproductive health indicators. Conflicts, insurgencies and natural disasters such as the Asian tsunami 2004 have occurred with devastating loss of human life and property. In spite of these the country has reduced its Total Fertility Rate to below 2.0 by 2000, maternal mortality rate to below 100 per 100,000 live births by the year 1975 and gained many other achievements in reproductive health. It is however valid to evaluate the reproductive health parameters in selected areas of poor performance in relation to periods without turmoil and those in the areas affected by disasters. Nuwara-eliya district in the central hill country and Monaragala district which are in the non conflict areas have been poor performers in relation to maternal survival as have Maternal mortality ratios of over 50 per 100,000 LB. In contrast Trincomalee, Batticaloa and Kilinochchi which also have MMR over 50 per 100,000 LB are in the areas of conflict. The reasons for the high level of MMR in the two groups of districts could be expected to be different and would be serious factors to consider in developing strategies to reduce maternal mortality in the respective locations. During the past forty years Sri Lanka experienced a series of major devastations. The "southern insurgency" arrived on two occasions the first in 1971 to 1972 and the second 1987 to 1989. Both events were severe acute disruptions of the entire social fabric. The tsunami of 2004 was a severe acute problem affecting the coastal areas in the Southern and eastern parts of the

country. The thirty year conflict in the northern and eastern provinces of Sri Lanka is an example of a gradual, persistent and harsh reality. The reproductive health performance under these circumstances and its gains if any may provide an insight into the policies needed to provide quality reproductive health the people of Sri Lanka require during the time of peace.

During time of peace many other factors affect the reproductive health status. The serum and seminal plasma levels of agro-chemicals were demonstrated to be significantly higher in those plantation staff from tea estates using these substances in comparison to those indulging in organic methods of agriculture. Similarly pollution caused by lead in vehicles has caused serious effects on infant health which was reversed by the use of un-leaded fuel. During the time of peace if Sri Lanka is to achieve the millennium development goals by 2015 all health and non health factors need to be further strengthened and re-organized.

Symposium 4- Injury Prevention

SY4-01

From Risk Perception to Health Effects: The Case of the Chikungunya Outbreak in La Reunion Island

Michel Setbon

EHESP-CNRS, France

Between March 2005 and May 2006, La Réunion Island was hit by an outbreak of chikungunya fever which affected 260,000 people (38% of the island's population). Chikungunya is a viral disease transmitted through mosquito (*Aedes albopictus*) for which there is no effective treatment nor vaccine. La Réunion is a French overseas territory located in the Indian Ocean and provided with all modern medical and public health facilities. In order to identify the distribution of the infection and factors related to probability of contamination, a socio-epidemiological survey was conducted in May 2006 on a representative sample of the population (N = 1,035). Data collection included two families of individual factors: on the one hand, objective ones as socio-economic, demographic and environmental characteristics and, on the other hand, subjective factors such as perceptions of risk, the experience of the disease, the perceived effectiveness of methods of protection, knowledge and beliefs about the origin of the disease and routes of transmission, as well as attitudes and protective methods employed. The statistical analyses (bivariate and multivariate analyses) reveal meaningful, socially differentiated groups related to probability of contamination. Like that, it was shown that probability of contamination was significantly associated with, 1) a socioeconomic status characterizing disadvantaged people living in individual houses with gardens; 2) the existence of alternative beliefs (not scientifically proven) on the causation and transmission of the Chikungunya infection which, along with a fatalistic attitude, create a feeling of uncontrollability to protect oneself against the