

**OPENING SPEECH BY HON. PROF.
PETER MSOLLA (MP), MINISTER
FOR HIGHER EDUCATION SCIENCE
AND TECHNOLOGY, AT THE
OPENING CEREMONY OF THE
INTERNATIONAL CONFERENCE ON
THE USE OF PESTICIDES IN
DEVELOPING COUNTRIES, ARUSHA
INTERNATIONAL CONFERENCE
CENTRE, ARUSHA, 16TH OCTOBER,
2006**

- **The Vice-Chancellor, University of Dar es Salaam, President TAAS, Prof. Mathew Luhanga,**
- **CACO – Prof. Nkunya**
- **DG – TPRI – Dr. Bamwenda**
- **The President, Society of Environmental Toxicology and Chemistry – (SETAC Europe), Madam Yoke Van Wensem,**
- **The President SETAC Africa, Prof. Victor Wepener,**
- **The Representative of Organisation for the Prevention of Chemical Weapons (OPCW), Mr. Bijoy Chatterjee,**

- **The Head SIDA Regional Rural Development Office, Nairobi, MS. Eidi Genfors,**
- **The Director, International Programmes in chemical Sciences, Uppsala University, Sweden, Prof. Peter Sundin,**
- **The Dean, Faculty of Science, University of Dar es Salaam, Prof. Evelyn Mbede,**

- **The Chairperson of the Conference Organising Committee and Executive Secretary of the African Network for the Chemical Analysis of Pesticides (ANCAP), Prof. Michael Kishimba,**
 - **Distinguished Conference Participants,**
 - **Ladies and Gentlemen,**
1. Let me start by acknowledging the honour bestowed upon me for having been invited to officiate your Second International Conference whose theme is

“Environmental Fate, Effect and Impact of pesticides on Human Health” Environment”.

There is no doubt that this is a very topical issue not only for the developing countries but globally. Consequently, I feel privileged to be associated with this conference in my capacity as a Guest of Honour and an inquisitive participant.

2. **Mr. Chairman and Conference participants,** Let me also take this opportunity to welcome all the conference delegates to Arusha and to this conference in particular. Special welcome is for colleagues who have travelled from outside Tanzania to come and share their experiences with us. It is my sincere hope that, the environment in Arusha will be conducive enough for your serious deliberations.

3. Mr. Chairman and Conference participants, I am informed that the key objectives of this conference are, but not limited to:

- Discuss and exchange knowledge about pesticides: their use and impact on public health, environment and wildlife;

- Provide a forum for developing countries to voice their opinions and concerns on pesticides as applied in their countries, after the 1998 resolutions made in Costa Rica;
- Contribute to a science-based understanding of the issues and public concerns related to pesticide use in developing countries;

- Comprehensively address the issue of Maximum Residue Limits (MRL) as required in International Trade and the consequent economic effects to developing countries;
- Formulate sustainable strategies of solving and preventing the recurrence of problems associated with manufacture, importation, formulation, distribution, storage, use, and resources for management of pesticides in developing countries; and

- Develop mechanisms of marshalling policy and decision makers' involvement and support in all matters pertinent to pesticides in developing countries.

4. **Mr. Chairman and Conference**

participants, it is broadly acknowledged that the role of pesticides for enhanced agricultural production and improving human health has been phenomenal.

Pesticides have been able to control epidemics such as the rodent transmitted Weill's disease and Bubonic Plague which claimed millions of lives in Europe; and Potato blight which caused the Irish potato famine; as well as the control of locusts and mosquitoes which have caused extensive crop losses and wide spread malaria and Yellow fever in Africa respectively.

Pesticides have also been used widely in the control of various ectoparasites such as lice, mites, ticks and bed bugs. Further research and development of chemical pesticides and herbicides, mostly organochlorine and organophosphate based compounds resulted into enhanced efficiency in agricultural production by allowing for efficient weed control by application of herbicides early in the growing season and eradication of insect pests.

One pesticide which was used very extensively since the beginning of the Second World War is the Dichlorodiphenyltrichloroethane (DDT) and had proved to be extremely efficient in the control of pests.

5. **Mr. Chairman and Conference participants**, post harvest losses due to pests have caused significant crop losses.

In West Africa for example, estimated losses in stored crops is said to be 25% while that of India is 8%. Consequently, many of the developing countries view the use of pesticides as inevitable if they are to obtain greater food supplies to meet the ever increasing demands of the demographic explosion. This strong feeling has been entrenched in the minds of people based on established facts.

For example, Ghana was able to treble its cocoa exports by using pesticides to control the Capsid bug while Pakistan was able to increase the sugarcane crop by 30% through the application of pesticides. The United Nations Food and Agricultural Organization (FAO) – estimates that without the use of pesticides, the potential losses in various crops would be 70% maize, 56% Coffee, 52% Cocoa, 50% Cotton, 42% Wheat and 36% Rice.

It is apparent from the aforesaid that pesticides have played an important role in enhancing not only food productivity but also human health in the developing countries.

6. **Mr. Chairman and Conference**

Participants, whereas there have been enormous gains through the application of pesticides; there have also been parallel undesired and deleterious effects of pesticide application on both the environment and Public Health.

Consequently, there have been growing concerns about the hazards of using pesticides including DDT which has a residual effect on animal tissues. With increased awareness, the consumers now demand not only for quality requirements but also for quality assurance so that the amount of pesticides residues remaining in the food chain are within acceptable limits.

Thus, extensive application of pesticides and in particular the organochlorines may have both short and long term health hazards including reproductive failures, neoplastic and neurological disorders etc. As a result of these concerns the use of organochlorine pesticides has either been very severely restricted or their use totally banned in the developed countries, an aspect which resulted in the signing and ratification of the Stockholm Convention on Persistent Organic pollutants of 2001.

Unfortunately most of the pesticides which have been banned or whose use has been severely restricted in the developed world are still being marketed and used in developing countries posing serious risks to the health of millions of people and the environment.

To make it worse, the developing countries have weak import controls, poor storage and stock management as well as lack of training in appropriate pesticide use.

It will be of interest to note that a way back in 2001, the United Nations Food and Agriculture Organization (FAO) and the World Health Organisation (WHO) warned of the poor quality pesticides being marketed in developing countries and observed that about 30% of the marketed pesticides did not meet the internationally accepted standards and that the problem is widespread in Sub Saharan Africa.

7. **Mr. Chairman and Conference**

Participants, the other critical issue with regard to pesticide use is in relation to international trade. Export commodities from developing to developed countries are primarily agricultural and aquatic products. Their entries into international markets demands very stringent zoosanitary and phytosanitary requirements as stipulated in the General Agreements on Tariffs and Trade (GATT) in Uruguay, 1994.

Fortunately one of the impacts of globalisation has been the decline of barriers to trade, services and capital, (specifically tariff barriers) with rapid growth in the volume of cross – border trade and investment. On the other hand, the fall in tariff barriers has apparently been replaced by the rise of non tariff barriers such as subsidies, technical regulations and standards, the last two (technical regulations and standards) having a negative impact on the export potential of many developing countries where there is no capacity to comply with.

Among these requirements is the Maximum Residue Levels (MRLs) for pesticides which has been very challenging. It is even worse for the European market where these requirements are set even for non – edible commodities like flowers.

8. **Mr. Chairman and Conference**

participants, it is apparent that the challenges posed by the continued use of pesticides are enormous and yet there has to be a way forward since life has to continue.

However, given the quality of the participants at this conference and the experiences therefore, I have every reason to believe that you, at the end of this conference, will come up with pragmatic recommendations to address the problems of pesticide usage in developing countries. While I am not an expert in the subject matter like you the participants, allow me to give some ideas and/or challenges in an attempt to move forward in addressing the problems associated with the use of pesticides in our countries as follows; but certainly not limited to:

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(i) Alternative pesticides for use in the field

Efforts should be made to gradually move away from using chemical pesticides to organic pesticides. This requires more research and already some plants have shown broad pesticide effects. This move will greatly promote organic and restorative farming whose products are currently fetching premium prices in the World markets.

(ii) **Biological control of pests**

Alternative pest control programmes such as biological control methods should be developed and disseminated to farmers. Research on this aspect should have a regional approach in order to have economies of scale.

(iii) **Sensitisation**

Deliberate efforts should be made by the Government and other stakeholders to embark on awareness campaign on the existing regulations and the new market requirements for exports.

(iv) **Training**

Training of stakeholders, farmers/ peasants, extension staff, agricultural staff and exporters is essential more so on the issue of certification, audit and how to comply with the ever stringent market requirements.

(v) **Good Agricultural Practices.**

Farmers/Peasants and extension staff should be educated on the potential risks posed by the continued use of pesticides and the importance of promoting sustainable and environmentally sound good agricultural practices (GAP).

(vi) **Human Capital Development**

It is essential to develop the human capital with the necessary skills for purposes of analysing residues and other undesirable pollutants locally rather than sending samples abroad with attendant exorbitant costs. This requires elaborate equipment in accredited laboratories.

Development of simple field diagnostic tools would be essential for epidemiological studies in particular the monitoring and ecotoxicological studies which are important in safeguarding public health and environment.

(vii) **Research and development**

Strengthen research and development of seeds and plant varieties, including indigenous ones, which are resistant to pests and plant diseases.

(viii) ICT integration in pesticides research

This aspect needs to be assimilated and fully exploited in particular the sharing of research facilities (instrumentation) globally by remote control. Such development does greatly enhance the analytical capability of the developing countries at relatively low costs.

(ix) **Crops to be grown**

Farmers should be encouraged to grow crops with comparative advantage and indigenous products such as vegetables, fruits and flowers that grow in a diverse of conditions and requiring minimal inputs. Sesame seeds are a good example for the production of cholesterol free oil.

(x) Continued use of pesticides

Knowing that we will continue using pesticides, it is important that we abide by the FAO/WHO pesticide specifications to ensure the production and trade of good quality products leading to human and environmental health.

(xi) Pesticide authority at National level

There is need to establish a single competent authority and a recognised independent verification (audit and

verification) system so as to create coherency across all relevant public and private sector bodies dealing with pesticides and agrocommodities safely. The role of the Tropical Pesticides Research Institute (TPRI).

9. **Mr. Chairman and Conference Participants,** this is by no means a prescription rather these and others that you will come up with are ideas on how to go about with the management of pesticides leading to human and environmental health.

10. **Mr. Chairman and Conference**

Participants, at this Juncture, I wish to express my very sincere gratitudes to the African Network for the Chemical Analysis of Pesticides (ANCAP), the Society for Environmental Toxicology and Chemistry-Africa (SETAC - Africa) and the University of Dar es Salaam for successfully organising this conference.

Special thanks go to the Swedish International Development Agency (SIDA) and the Organisation for the Prevention of Chemical Weapons (OPCW) for their material and financial support in making this conference a practical reality.

11. **Ladies and Gentlemen**, I shall, as one of the stakeholders, eagerly await for the resolutions coming from this conference. You have my full support in your endeavours.

12. **Mr. Chairman and Conference participants**, with these remarks, it is now my pleasure and honour to declare your second conference on ***“Environmental Fate, Effect and Impact of Pesticides on Public Health”*** Officially Open.

**= I THANK YOU FOR YOUR
ATTENTION =**