Vol. 14

June 2010

No. 1

### Editorial

### Food Safety and Consumer Demands

A safe food supply requires several different elements. These include regulatory bodies equipped with appropriate resources, ethical manufacturers and suppliers, tightly managed supply chains and the existence of and adherence to independent standards of quality. When we speak of foods, we speak not only of finished food products but also of the various ingredients that comprise these foods. Because we hear far less about food ingredient quality and safety than, say, microbial contamination of fruits, vegetables, milk and meats. The question becomes whether there is actually a need to focus time, energy, expertise and resources to this area. The answer is yes. This has been proven through the problems that have received widespread media coverage over the past few years, such as infant formula adulterated with melamineincidents that harmed consumers caused by the undetected hazard that was intentionally introduced into the food supply chain as an adulterant to a bonafide food

"Quality" takes into account a host of factors: that the ingredient is what it claims to be (identity); that it is not contaminated, adulterated, diluted or otherwise inferior product; and that it is consistent from batch to batch. Global sourcing is a strategy that most manufacturers pursue to minimize costs and to secure a single (or more) source for their global needs. One product could contain ingredients produced in 10 or more countries. Economics are key factors in the food business, but do we need to ask if there is a reason why one source of an ingredient is less expensive than another? With the availability of an independent standard to define and assess the authenticity and quality of a food ingredient, suppliers and manufacturers can more easily meet each other's expectations with regard to critical quality attributes. Manufacturers can demand that their products adhere to the standard fixed by the Food Act / the Nepal Quality Standard Act, and suppliers can use their adherence to these standards as a means of differentiation. As new ingredients emerge, as pressures to keep food prices low continue and as the globalization of the industry persists, ensuring quality can become very difficult. Independent quality standards can be a key part of supply chain management.

# Soil Improvement and Seed Quality Training



Training in Progress

Woman in science & Technology (WIST) in collabration with a local NGO, Integrated Development and Management Centre(IDMAC) working on social mobilization for Irrigation subprojects in Kathmandu and Lalitpur districts observed that Women farmers play the key role on soil fertility management and selection of seeds for plantation. They make compost and are always in search of good seed varieties to increase the crop yield. However, their knowledge on good compost making as well as seed selection is not stuffiest and upscale. In IDMAC there are some well trained and skillful women motivators who are good at training management and motivating the women farmers on gender issues in agriculture. The main objective of the training was to empower the women's group by disseminating the knowledge on a proven package of sustainable soil management techniques together with use of quality seed to expand crop diversification, enhance income and improve food security.

Accordingly, Dr. Surya Laxmi Maskey, President of Women in

Accordingly, Dr. Surya Laxmi Maskey, President of Women in Science and Technology (WIST) and Ms. Devaki Shrestha, the General Secretary of WIST conducted three lots of Training on Soil Fertility Management and Seed Quality for the Women Farmers' Groups in three different Village Development Committees (VDCs) in Kathmandu district in coordination with IDMAC and Water User's Association (WUA). The first training was conducted at Baluwa VDC followed by second training at Sankhu (Bajrayogini VDC) and the last training was conducted at Tokha VDC. The number of participants in the training ranged from 10 to 15 farmers in each location. The training was especially for women farmers; however there were 2-3 male farmers in each training.

All the trainings were conducted with effective participation of the farmers who raised issues and questions and answers were searched with brain storming exercises and discussions. Different theoretical aspects of soil and seed development were discussed during the training program which was later followed by practical demonstration and hands on exercises. All the participants were very much interested in learning and actively participated during the training period. The practical was conducted with farmer's cooperation in one of the farmer's field. The materials for compost were brought by the participants themselves and made pit with the instruction from the resource person. The hand outs with diagram and pictures were distributed to all the participants In case of seed, the farmers received 2 kg of high quality

certified seeds of Khumal 4 rice variety as the training kit.

The training course content was designed basically to address the assues in soil management and seed quality. However to start up the training, a general discussion was held on the role of women in agriculture in Nepal and understanding of the women's contribution in the country's economy.

The major contents in the training in soil fertility improvement included type of soil, soil testing, soil sampling for laboratory test and biofertilizers and microorganisms, soil nutrients. Similarly, in Seed Quality, the course content was characters of high quality seeds and seed varieties, seed testing for germination and purity.

Binu Shrestha and Krishna Man Joshi, vice chair person and secretary of IDMAC helped out as supporting staff to motivate and logistics for the training.

The cost of the training was borne by

the participants and IDMAC which was just enough to purchase the required materials and miscellaneous support

The participants extended their thanks to WIST and IDMAC and resource persons who taught clearly and sincerely. The participants committed to make better compost in their homestead for the next season and requested to visit again.

## **ENVIRONMENT AND AIRPOLLUTION IN ASIA**

Air pollution is a rising environmental challenge in the region and is also intrinsically linked to greenhouse gas emissions and global warming with consequential impacts on human health, agriculture, forests, water bodies and water budgets, physical structures and habitats. The per capita emissions in Asia are low as the region supports a large and growing population but as lifestyles change this will also rise. Already, the total consumption of commercial fuels, with the bulk being fossil fuels, is higher in the region than in many other regions of the world. It is necessary, therefore that the countries of the region cooperate to chart a course of action that will promote collective monitoring of the air pollution phenomena and also take measures to moderate the consumption of energy sources by appropriate means. It is also necessary to study the magnitude of the impact on the people and natural resources of the region while also recognizing the global responsibilities that may be involved as that would help in putting together individually as nations or collectively as a region, policy measures to abate air pollution and its deleterious consequences.

Individual nationas should take the following actions to reduce the air pollution level depending on their individual situations /conditions.

(a) Development of policy measures including regulatory and fiscal measures (economic incentives and disincentives) and employment of available technologies to attain agreed emission standards in the industrial sector eg adoption of cleaner coal technologies in all thermal power plants and industries using coal so as to reduce emissions to more strict minimum standards over a negotiated time period at the national level might be developed.

- (b) Development of policy measures and employment of available technologies to attain agreed emission standards in the transport sector. For example, taking up Cleaner City Initiatives over a negotiated time period at the national level in all cities having more than 10 million inhabitants.
- (c) Development of policy measures to promote the use of renewable energy sources in the domestic sector.
- (d Enhanced multilateral cooperation to support national programmes.
- (e) Development of long-term scenarios for, say, 2020, 2030, 2040 and 2050 regarding population, urbanization, economic activity, energy pathways, transport systems, emissions, impacts, mitigation, poverty, costs, co-benefits, practices, public awareness, global expectations and requirements.
- (f) Development of national programmes on atmospheric environmental management according to the priorities, capabilities and time-scales of individual countries.

#### Air Quality Management At National Level

 Formulation of Policies, laws and regulations with respect to air quality management, integrated with relevant Conventions and Treaties.

### Ms. Sushma Upadhyaya

- 2 Strengthening of national environmental agencies, to include air quality management divisions.
- 3 Strengthening of an inspectorate branch to enforce air quality and emissions regulations.
- 4 Surveillance and data systems for recording air pollution impacts on public health, crops, materials and ecosystems, using harmonised regional approaches.
- 5 National emissions inventories for main pollutants and assess the impact of different policies and measures on these emissions.
- 6 Establishment of at least one air quality monitoring station using harmonised regional instrumentation and protocols [and link this with modelling efforts in the region].
- 7 Regulations for industry to monitor their emissions and provide the data and calibration certificates to regulatory agencies as required.
- 8 Harmonisation of air pollution standards within the region.
- 9 Periodic review to benchmark regional, national air quality standards against best international practice.
- 10Periodic state-of-atmospheric environment reports
- 11 Harmonised policies and management strategies that impact the atmospheric environment across key governmental agencies, for example departments of energy, health, agriculture, planning, finance and transportation.

## Introducing the Women Scientists of Nepal and their views

Ms. Sandhya Karmacharya



Address:

House No.165, Bhakti Thapa Marg, Naya Baneshwor,

Kathmandu, Nepal, Tel.No: 977-1-472146, 4472175, Cell: 980-858-4679. Email:sandhyabechu@hotmail.com Present Status:Independent consultant (after Retirement from Nepal Govt. Service )

Academic record M.Sc.(Organic Chemistry),

T.U.Kirtipur, Nepal

Experience: Ms. Sandhya karmacharya has extensive experience in food and feed commodity analysis and food research laboratory management. Being a Public Analyst, she has in depth knowledge on food and feed adulteration and contamination problems of aflatoxins, pesticides, heavy metals, and bacterial metals, and bacterial contamination and its trend in Nepal .In the food laboratory management, she has state of art know-how on good laboratory practices, laboratory accreditation and harmonization of food standards.

Her work experiences extended many surveys on aflatoxin contamination on various foods and feed commodities of Nepal. She has participated in the national and international workshops, seminars, symposiums and meetings related to food quality and safety measures and International Codex standards and regulations. She started her career as an Asst. Food Research Officer in the Department of Food Technology and Quality Analysis in 1970 and worked till 2004, retiring from the post of Senior Food Research Officer, with a short period as a Scientific Officer, in the Department of Medicinal Plant (MOFSC). She has published research papers and articles in scientific journals and Bulletins in Nepal. Her views on Women in Science an and d Technology Food Safety is a serious issue in our context due to poverty and ignorance. Large number of population is suffering from food and water borne diseases due to lack of knowledge and awareness. All the consumers especially housewives need to be extra careful about the food we eat, select, prepare and storage by taking elementary precautions. The role of Women in Science and Technology (WIST) should be directed to create awareness to consumers to improve the food safety and to protect the public health. Food safety awareness programme need to be conducted in farm to table approach to improve safety of food at each step in food production, distribution processing, preservation, in household preparation and consumption and marketing chain. Every citizens have a great responsibility for ensuring safe food and safe food handing as consumers. It is Sure, Safe, Healthy, Nutritious and Hygienic Practices in daily life that is a step for healthy and long life.

#### Ms. Rajeshwori Basnyet



Address: Ohm House, Pepsi Cola Marg, Ward No.-35, Pepsi Town Planning

Kathmandu, Nepal, Tel. No: 977-1-4992127 Email: prasunicky1@yahoo.com Present Status: Independent consultant (after Retirement from Nepal Govt. Service).

Executive member, Integrated Development and Management Centre(IDMAC)

Academic record: M. Sc. (Agronomy), Mississippi State

University, USA Experience: She has a long experience of Seed Analysis of Agricultural and Horticultural seeds and also management of the Seed Testing Laboratory since she started her career as a Seed Inspector in the seed Testing Laboratory in 1970, now under NARC. Later, in 1989, she worked as an Agronomist in CIRD/ the Department of Irrigation, Under the Ministry of Water Resources, Government of Nepal. In 1992, she participated in gender main streaming project in South Asian countries and she worked in the field in irrigation projects as a trainer, motivating effective participation of women, particularly irrigation water management, institutional development of WUAs, and enhanced agricultural activities in the different irrigation projects across the country. As a training consultant she worked for DAN, Wplus and IDMAC in the field of gender main streaming, institutional development of WUAs and farmers training at the grass root level.

Her views on Women in Science an and d Technology Young Nepali women, aspiring Scientists and Technologists have enormous opportunities to explore the potentialities of natural resources and indigenous knowledge through research and development studies in the rural Nepal. An organization like WIST, should allow the young female Scientists Technologists to experience and observe demonstration of actual events which happen in the field and life of their predeces. Next, the young scientists raised in the urban universities need to reach out to rural women to bring about changes in their lives in terms of understanding on systematical/scientific phenomena and process, there by stopping make believe superstitions and taboos. It will help them to update their knowledge and skills to increase farm productions as well as their views on food and nutrition. health and hygiene, conservation of natural resources and climate change.

### **WIST Activities**

 Ms. Eleanor Chandler, a visitor from United Kingdom delivered a talk program on 'Transition Network' which is a worldwide program supporting community led responses to climate change and shrinking supplies of cheap energy, building resilience and happiness. She mainly talked about the role of Transition Network to inspire, encourage, support and trained the communities' round the transitional model creating initiatives that rebuilt resilience and reduce CO2 emissions. She also inform about the activities initiated by the communities and the government support projects on transitional model in her town Totnes, Devon in U.K. The talk program was coordinated by Ms. Devaki Shrestha in March, 2010. There were 20 participants in the talk program.

Dr. LeeLa Joshi, a member of the WIST, delivered a talk

program on:

X- Study on Mesomorphism of Sunset - yellow and water" on 8th Aswhin, 2067 in the Department of Natural Products Resources, Thapathali.

 Dr. Surya Laxmi Maskey President of WIST and Ms. Devaki Shrestha, the General Secretary of WIST coordinated

and organized three lots of Training on Soil Fertility Management and Seed Quality for the Women Farmers' Groups Baluwa. Bajrayogini(Sankhu), and Tokha V.D.C. on 15/8/2067. 23/10/2067 and 10/1/2068 respectively. The training program was organized in coodrdination with IDMAC and

local farmers and Irrrigation Water User's Groups.

A training on Fruit processing was conducted and successfully completed by Chandra Shakya, treasurer of WIST, from 2068/3/15 to 2068/3/17.It was sponsored by World Vision and coordinated by Mede - Nepal. The fruit Processing course contents Jam, Jelly and squase making from pear and plum.

### CONGRATULATION

Dr. Surya Laxmi Maskey, president WIST has been awarded Letter of Appreciation by Nepal Academy of Science and Technology (NAST) on its Anniversary Day on 20th Mangsir 2067. The executive committee and the members of WIST congratulate for her life time grand achievement and wish her bright future.

WIST appreciates the recognition of NAST for the contribution of Dr. Maskey in the field of Science and Technology by awarding the Letter

of Appreciation.

### EXECUTIVE COMMITTEE MEMBERS

President Dr. Surya Laxmi Maskey Tel. 014357316 (Res.), 9803147255(M), Email: suryamaskey64@hotmail.com Vice- President Ms. Urmila Joshi Tel.5554842 (Res.), 4493188 (Off.), 9841292101(M) Email:shivacs@ntc.net.np General Secretary Ms. Devaki Shrestha Tel. #4650888 (Res.), 9841223208 (M) Email:devaki1111@gmail.com Secretary Ms. Padma Vaidya Tel: 2327574, 9841555563 Email:padmavaidya2005@yahoo.com Ms. Chandra Shakya Tel. #1278124 (Res.), 9841509925(M) Members Ms.Shandhya Karmacharya Tel.#: 977-1-472146, 4472175(Res.) 980-858-4679(M)

Email: sandhyabechu@hotmail.com Ms. Roshani Shrestha Tel. # 4271629(Res.), 9841272571(M) Email:armodule@wlink.com.np

**Ms. Sushma Upadhyaya** Tel. #4490246(Res.), 4413540(Off.), 9841343371(M) Email:upadhyaysushma@hotmail.com

Ms.Rama Shrestha Tel. #43142971(Res.), 9841202364(M) Email:rsd@info.com.np Ms. Rejina Maskey Tel. # 4490858(R), 9841359172(M) Email:meregina@yahoo.com Ms. Roshani Shrestha Gajurel Tel#.4444848® Advisors Dr. Keshari Laxmi Manandhar Tel #5521736 Ms. Ram Badan Pradhan Tel# 4416765 (Res.) Email: psatrughan@mail. com.np Ms. Shanti Devi Sharma Tel# 4410363 Support Staff Ms. Hasana Sthapit Tel#4276914(R) 9841317348(M) Mr. Hari Shrestha 841613748(M)

**Annual General** 

Meeting 17th Annual General Meeting of the WIST was held on Aswin 8, 2067 at the meeting hall of the Department of Plant Resources. The meeting was chaired by Dr.Surya Laxmi Maskey, the Chairperson of WIST. She welcomed all the participants. Ms. Devaki Shrestha, the General Secretary and Chandra Shakya, the Treasurer, presented annual progress report and financial statement respectively while the vice-president Ms. Urmila Joshi, extended the vote of thanks to the participants. Sixty WIST members participated in the annual meeting and the new executive committee was formed according to the WIST regulations. Ms. Padma Vaidya replaced Ms. Nayan Tara Tuladhar to the post of Joint Secretary and Dr. Roshani Gajurel was elected as a new member in the newly formed **Executive Committee replacing** Ms. Jeevan Prava Lama. The meeting was addressed by the former President and present Advisor of WIST, Dr. Keshari Laxmi Manandhar, who gave many suggestions to make WIST a viable, active and dynamic organization. Similarly, Dr. Surya Laxmi Maskey, the president of WIST, highlighted the upcoming WIST program and called upon younger generation to come up with innovative programs to empower the women scientists and WIST.

Membership

Total Members of the WIST: 445

Membership fee: Entrance

: Rs. 50/-

General Members Asso.Members Life Members

: Rs. 150/-: Rs. 300/-: Rs. 2000/-

WIST is compiling and upgrading the CV/Biodata of Women Scientists and Technologists of Nepal. Please fill in the format and help in upgrading its publication. WIST also invites the project proposals on research and development from the women scientists for annual program 2068/69. Please contact Dr. Surya Laxmi Maskey for further information.

Editorial Staff - Dr. S.L. Maskey, Ms. U. Joshi, Ms. D. Shrestha, Ms. S. Upadhyaya all enquiries & Information solicited to WIST Secretariat P.O. Box 12743, Kathmnadu, Tel: 4249995, Website: www.wist.com.np