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### MESSAGE

— Today, one of the main global challenges is how to ensure food security for a world growing population whilst ensuring long-term sustainable development. Food production will need to grow by 70% to feed world population which will reach 9 billion by 2050. The issue of global food losses and waste has recently received much attention and has been given high visibility. Almost one-third of food produced for human consumption – approximately 1.3 billion tonnes per year is either lost or wasted globally: their reduction is now being felt as essential to improve food security and to reduce the environmental footprint of food systems. In light of the incidence of the huge post-harvest losses in the region and new challenges faced under trade liberalization and globalization, serious efforts are needed to reduce post-harvest losses, especially of fruit and vegetables. This would include linking operations and actors involved more closely and systematically, modernizing marketing infrastructure and technologies, capacity building of individual actors, and strengthening the policy/institutional settings for better marketing. The concerted efforts of all, including the private and public sectors, are required to alleviate these constraints.

One of the methods to overcome this problem is to increase local value-added food products, through the development of rural agro-industries based on a commodity approach, by strengthening the post-harvest sector at national level. Processing of food crops to a form which has a longer shelf life and at the same time adding value to the original crop help the farmer not only to overcome the spoilage and losses, but also earn more money due to the newly added value of the product.

High moisture content, insect infestation and damage during handling are the main causes of crop losses. Appropriate packaging materials, proper storage facilities and transportation are required to minimize these losses. Absence of toxicity and anti-nutritional factors in the raw materials are also important conditions in determining the quality and safety of processed foods. Modern food processing techniques and post-harvest technologies are the main tools to reduce food losses and maintain/raise the quality of products. They are the only means to develop processed, semi-processed and new products with added value, at lower cost, and with reduced energy and labour. These products have higher consumer demand because of their extended shelf life, value and safety. Therefore, there is an urgent need to ensure sustainable food security through reduction of post-harvest losses, improvement of food processing and preservation methods, development of appropriate technologies and equipment, production of value added food items and through minimizing work load, time and energy requirement in the post-harvest sector.

Organization of International Congress on “Post-Harvest Technologies of Agricultural Produce for Sustainable Food and Nutritional Security” is a welcome initiative. I am confident that deliberations, presentations and recommendations of the congress will be useful for the academicians, policy planners, research scholars, students and for the public at large for their wider interest and for the betterment of humanity.

  
(Mangala Rai)