

Editorial Note

“Second International Conference on Horticulture 2023” on the theme “Advancing Horticulture in Changing Climate and Biodiversity” was jointly organized by Nepal Horticulture Society (NHS), National Center of Potato, Vegetables and Spices Crop Development Center (NCPVSDC) and National Center of Fruit Development (NCFD) in April 3-4, 2023 at Godavari Village Resort Lalitpur. Our country has enormous potential to produce a wide range of horticulture crops and their subsequent value-chain development. These crops play a pivotal role in improving the food security by providing nutrient-rich foods, diversified diets, generating incomes and building climate resilience.

Climate Change has caused reduction in production which is negatively affecting the livelihood of farmers. Abiotic stresses like temperature extremes, drought, inundation, salinity, erratic rainfall have been major challenges for proper yield of horticultural crops. The farmers are unable to cultivate and harvest as done in the last several years. There has been a shift in ecological zones. Adaptation strategies such as breeding more heat and drought tolerant crops, changing irrigation practices, implementing pest and disease management plans will be crucial to ensure the sustainability of horticultural crop production in a climate change. Proper integration of horticultural crops into farming system can help combat the climate change to several extents. More use of renewable source of energy, afforestation, adoption of conservation agriculture, sustainable agriculture, increased use of greenhouse etc. can be effective to tackle the modification caused in yield of crops due to climate change.

The farmers of Nepal mostly depend upon the local genetic resources. Maintenance of these local resource is important to improve the biodiversity. However, loss of biodiversity has been a major concern due to climate change recently. Different crops have their own adaptability according to their ecological zones which is disturbed by climate change. The increased risk of endangering of genetic resources may be due to change in wildlife habitats or suitable temperature. Growing of a range of diversified crops is more likely to withstand as well as mitigate the climate change effects. Maintenance of agro biodiversity can help to support against such losses by proper sustainable measures.

In this context, the second international conference on Horticulture was able to meet the objectives of the conference having through discussions on the production issues, the impact of climate change and biodiversity on Horticulture. There were four country papers and 9 thematic papers presented in the plenary session. One country paper of Nepal was presented in inaugural session. 36 Technical papers were presented in two parallel technical sessions. Five SAARC countries – Pakistan, Bangladesh, Sri Lanka, Nepal and Bhutan presented papers on status of horticulture development of respective countries in the plenary session. There were also 16 poster presentations. The last session was devoted to draw recommendations of the conference. The editorial board declares that the views and the data presented in the papers/posters are purely of the respective author(s). The committee remains neutral on author’s view and nothing to do in it except that it did general editing works to bring it to an appropriate shape. I hope the information and the findings presented in the proceedings bear productive impact on horticultural research and development of Nepal as well as SAARC countries. The committee highly acknowledges all the concerns who contributed the Second International Conference on Horticulture and anticipates for their valued support and cooperation in the days to come too. Thank you very much.

Puspa Raj Poudel, Ph.D.

Editor in Chief

Nepal Horticulture Society