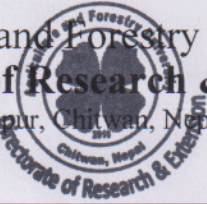




Agriculture and Forestry University
Directorate of Research & Extension

Rampur, Chitwan, Nepal



Date: 2077.10.16

CALL FOR PROPOSALS

Directorate of Research and Extension (DOREX), AFU seeks proposals from its postgraduate students which will be supported financially from Value Chain Development Project (VCDP), UNDP/MOALD. We hereby inform interested Master level students enrolled in second semester from the relevant departments to apply proposal with in 2nd Chaitra, 2077 in email to karkiniranjan89@gmail.com. Available budget ceiling in this grant scheme is upto NRs. 1,50,000/- (including of all taxes) per slot to carry out research which is feasible to meet complete reporting deadline of Dec 2021. As per the policy of VCDP, priority will be given to students from women, dalit and janajati categories to mainstream the Gender equality and Social Inclusion (GESI) strategy.

Followings are potential research agendas from which few proposals shall be selected under the evaluation scheme of VCDP.

Research Agenda (Priorities)

SN	Research Agenda	Explanation
1	Effect of source of fertilizers on horticulture maturity, postharvest life and quality of cucumber	Pre- and post-production application of nutrient has impact on postharvest shelf-life. Examine the effects on maturity indices and postharvest life at production site and end markets.
2	Effect of postharvest treatments on shelf life of papaya	Postharvest applications of GA ₃ , KMnO ₄ and Salicylic acid are found effective to extend postharvest shelf-life to different fruit species. Examine their technical and financial viability in our context.
3	Efficiency of low-cost ripening chamber for banana to small and medium farmers	Develop and/or adapt low-cost ripening chamber and compare its efficiency with use of chemical like calcium carbide.
4	Management of plastic crates to control spread of postharvest disease	Assessment of the inoculum load, contribution on disease spread with use of recycled plastic crates and identify suitable management options.
5	Use of nano technology for postharvest loss reduction in papaya/banana/capsicum	Use of nano zinc oxide and nano silver particles have shown promise to extend postharvest life of fruits. Verify the technology in our context considering the cost involvement and economic return.
6	Packaging system for bulk transportation of banana	Banana is either transported in bunch or hands using leaves as cushioning materials. Examine the alternative cushioning materials, their rate of use and cost effectiveness of using the alternative means.
7	Assessment of quality standards of market arrival of vegetables from different sources at Kalimati	Different containers, size and maturity stages, grades are arrived at Kalimati from different production sites of Nepal and neighboring countries. Need to assess the situation of cauliflower, capsicum, cucumber, carrot and garlic.
8	Opportunities and challenges of cold storage business in Bagmati and Gandaki provinces	Assessment storage of fresh produces, economic advantage of stored commodities and economic viability of existing cold will be examined.
9	Management of major postharvest diseases of selected VCDP's commodities	Examine the extent of losses due to postharvest diseases, their causes and develop/verify adoptable management practices.(commodities: cauliflower/tomato/ banana/potato seed/cabbage)
10	Use of different cushioning materials to reduce postharvest losses during transportation in Doko	Transportation of fresh produces in Doko is unavoidable in hilly terrain, thus there is a need to recommend a low cost and efficient cushioning technology to reduce postharvest losses during the transportation from production sites to the roadhead in hilly areas.

(Prof. Dr. Arjun Kumar Shrestha)
Director, Directorate of Research and Extension,
AFU, Rampur, Nepal