



# FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

## INNOVATION LAB FOR LEGUME SYSTEMS RESEARCH



# The Future of Lentil Systems in Nepal

## Workshop and Expert Perspectives on Lentil Production Systems and Potential Opportunities

Photo courtesy of Bandana Pradham, CIMMYT

## WORKSHOP PROGRAM

December 15-16, 2021



**USAID**  
FROM THE AMERICAN PEOPLE



 **CIMMYT**  
International Maize and Wheat Improvement Center

**MICHIGAN STATE**  
UNIVERSITY

Thank you for joining the Feed the Future Innovation Lab for Legume Systems Research, in partnership with the Nepal USAID Mission and in collaboration with the Ministry of Agriculture and Livestock Development, National Grain Legumes Research Program (NARC), and Nepal Seed and Fertilizer Project (NSAF/CIMMYT), for this two-day exploration of lentil systems in Nepal.

## The Future of Lentil Systems in Nepal

Workshop and Expert Perspectives on Lentil Production Systems and Potential Opportunities

### Program Agenda

**Day I – December 15, 2021 (All Times Nepal)**

**4:45pm Opening Remarks**

Mr. Michael Weinraub, USAID - Workshop Moderator

Mr. Jason Seuc - USAID/Nepal

Dr. Doug Buhler - Michigan State University

Dr. Barry Pittendrigh - Feed the Future Innovation Lab for Legume Systems Research

**5:00pm The Current State of Lentil Production**

**Introduction**

Dr. Rajendra Darai - NARC, Grain Legumes Research Program

**5:20pm Agronomy Barriers to Productivity**

*Major agronomic barriers of lentil productivity in Nepal*

Mr. Ram Krishna Neupane - FORWARD

*The major agronomic barriers of lentil productivity in Nepal*

Dr. Mina Wasti Devkota - ICARDA

**5:45pm Climate Barriers to Productivity**

*Climate related barriers and implications to lentil productivity*

Dr. Moin Salam - University of Western Australia

**6:00pm BREAK**

**6:05pm Pests/IPM Barriers to Productivity**

*Economic pests and diseases of lentil in Nepal and their management practices*

Mr. Laxman Aryal - NARC

*Use of biocontrol agents in lentil IPM practices*

Dr. Rangaswamy (Muni) Muniappan - Virginia Tech University

**6:30pm Breeding and Genomics Innovation for Accelerating the Genetic Gains in Lentil**

*Advances in lentil breeding and genomics - lessons for Nepal*

Mr. Sandesh Neupane - University of Saskatchewan

*Lentil breeding strategies for the development of climate resilient varieties, lessons for Nepal*

Dr. Shiv Kumar Agrawal - ICARDA

**6:55pm Breakout Session**

Mr. Laxman Aryal - NARC  
Dr. Bal Krishna Joshi - NARC

**7:15pm Breakout Summary**

Mr. Laxman Aryal - NARC  
Dr. Bal Krishna Joshi - NARC

**7:25pm Panel Discussion Agronomic and Climate Related Solutions for Lentil in Nepal**

Moderated by Dr. Shiv Kumar Agrawal - ICARDA  
Dr. Tika Bahadur Karki - NARC  
Dr. Rajendra Darai - NARC, Grain Legumes Research Program  
Mr. Ram Krishna Neupane - University of Saskatchewan  
Dr. Moin Salam - University of W. Australia  
Dr. Mina Wasti Devkota - ICARDA

**7:50pm Closing of Day I**

Mr. Michael Weinraub, USAID

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**Day 2 – December 16, 2021 (All Times Nepal)**

**4:45pm Opening Remarks**

Mr. Michael Weinraub, USAID - Workshop Moderator  
Ms. Carol Jenkins - USAID/Washington  
Dr. Barry Pittendrigh - Feed the Future Innovation Lab for Legume Systems Research  
Dr. Ram Bahadur KC - NARC

**4:55pm Seed Systems and Extension Service for Productivity**

*Lentil seed systems interventions in Nepal - experiences from USAID's NSAF project*

Dr. AbduRahman Beshir - CIMMYT

*Knowledge-based integrated sustainable agriculture in Nepal - KISAN II project*

Mr. Harish Devkota - Winrock/KISAN II

**5:20pm Grain Markets and Trade for Productivity**

*Creating enabling environment for lentil grain markets - challenges and prospects*

Dr. Devesh Roy - IFPRI

*What it takes to have a sustainable and profitable lentil business model?*

Dr. Kiran Sharma - ICRISAT

**5:45pm Nutrition and Gender**

*Nutritional importance of lentil in fighting back malnutrition - experiences from a model work*

Dr. Dil Thavarajah - Clemson University

*Gender perspective in lentil farming and business - lessons for Nepal*

Dr. Suresh Babu - IFPRI

**6:10pm BREAK**

**6:15pm Breakout Session**

Dr. AbduRahman Beshir - CIMMYT  
Mr. Prakhyat Jung Thapa - KISAN II/Winrock

**6:35pm Breakout Summary**

Dr. AbduRahman Beshir - CIMMYT  
Mr. Prakhyat Jung Thapa - KISAN II/Winrock

**6:45pm Panel Discussion Markets, Trade, Private Sector Engagement and Enabling Environment**

Mr. Sandeep Agrawal - Shree Shyam Modern Dal Mill Pvt Ltd.  
Mr. Krishna Raj Bajagain - Trade and Export Promotion Center  
Mr. Subhas Raj Upadhyay - Lumbini Seed Company Pvt. Ltd.  
Dr. Rajendra Mishra - Agri business promotion division, Ministry of Agriculture and Livestock Development  
Dr. Rudra Bahadur Shrestha - KISAN II/Winrock

**7:15pm Reflections on Days 1 and 2**

Dr. Barry Pittendrigh - Feed the Future Innovation Lab for Legume Systems Research  
Dr. John Medendorp - Feed the Future Innovation Lab for Legume Systems Research

**7:35pm Closing Remarks**

Dr. Barry Pittendrigh - Feed the Future Innovation Lab for Legume Systems Research  
Dr. Govinda Prasad Sharma – Secretary, Ministry of Agriculture and Livestock Development

**7:45pm Conclusion of Workshop**

Mr. Michael Weinraub, USAID

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Dr. AbduRahman Beshir, CIMMYT [a.issa@cgiar.org](mailto:a.issa@cgiar.org) Dr. Rajendra Darai, NARC [rajendra5042@yahoo.co.uk](mailto:rajendra5042@yahoo.co.uk)

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## Presenters and Speakers

listed alphabetically



### Mr. Sandeep Agrawal, Shree Shyam Modern Dal Mill Pvt Ltd

Mr. Sandeep Agrawal from Shree Shyam Modern Dal Mill Pvt. Ltd. has also worked at several other lentil related businesses including Naman Exim Pvt. Ltd; Agritech Pulses; and Envipower Energy and Fertilizer Pvt. Ltd. He regularly attends lentil seminars and is the Secretary of Rupandehi Pulse Association and a board member of Nepal Rice, Oil & Pulse Association.

### Dr. Shiv Kumar Agrawal, ICARDA

Dr. Shiv Kumar holds a Ph.D. in Plant Breeding from the GB Pant University of Agriculture and Technology, Pantnagar, India. His area of expertise includes crop improvement through resistance breeding, widening the genetic base through pre-breeding, and development of genetic and genomic resources in food legumes. His contribution in identifying donors for new plant type in rice, extra early genotypes in chickpea, lentil, and mung bean, basic information on genetics of important traits, and pre-breeding populations in Vigna, Lens and Lathyrus species, are noteworthy.

During the 30 years of professional career, he in collaboration with national partners has contributed to the development of 51 lentil, 5 mung bean, 2 urdbean, 1 rice, and 3 grass pea varieties and published 201 peer-reviewed journal articles, 77 book chapters, 11 books, 7 technical bulletins, and 2 training manuals. He is a Fellow of professional societies including International Legumes Society, Indian Society of Genetics and Plant Breeding, and Indian Society of Pulses Research and Development. Dr Kumar has received many academic distinctions, fellowships including Rockefeller, and awards from national and international organizations/societies in recognition of his contribution in food legumes.

Presently, Dr. Kumar is leading ICARDA's South Asia and China Regional Program from New Delhi, India which aims to deliver improved germplasm of lentil, kabuli chickpea, faba bean and grass pea to national partners in South Asia and China. As a breeder, he works on developing short duration climate smart varieties of lentil and grass pea with high iron and zinc content for sustainable intensification of cereal based cropping systems.



### Mr. Laxman Aryal, NARC

Mr. Laxman Aryal, is a scientist at the Nepal Agricultural Research Council. His discipline in Plant Pathology and he research areas are disease resistance and management.



## Dr. Suresh Babu, IFPRI

Dr. Suresh Babu is the Head, Capacity Strengthening, International Food Policy Research Institute (IFPRI), Washington DC USA & Extraordinary Professor, University of Pretoria, South Africa. Dr. Babu is an international agricultural economist conducting policy research, capacity development, and policy advisory activities for more than 30 years in the Sub Saharan Africa, South Asia, Central Asia, and other developing regions. He joined IFPRI in 1992 and has served in several positions including the Coordinator of IFPRI's Southern Africa Food Security Program (1992-1997), Coordinator of its Central Asia Program (1997-2002), and Coordinator of its South Asia Initiative and its Policy Analysis and Advisory Network (PAANSA) (2000 – 2007). As a Senior Research Fellow and Head of Capacity Strengthening at IFPRI, Dr. Babu is guiding IFPRI's regional and country programs in their capacity development activities. In this leadership position, he has conducted many national dialogues leading to the development of national food security and agricultural policies of several developing countries in Africa including, Malawi, Ghana, and Nigeria and in Asia including India, Bangladesh, Nepal, Sri Lanka, and Bhutan. Dr. Babu has trained several senior policy researchers and policy makers in South Asian countries who are currently in leading policy making positions, directly influencing and shaping food and agricultural policies. He has been working on African Development issues for the past 30 years.

Before joining IFPRI, Dr. Babu was a research economist at Cornell University. He has published 20 books and monographs and more than 100 peer reviewed journal papers on food and agricultural policies in developing countries. Dr. Babu has held or currently holding visiting or honorary professorships at the University of Pretoria, American University, Washington, D.C. Indira Gandhi National Open University, India, University of Kwazulu-Natal, South Africa, and Zhejiang University, China. He is a visiting professor of the Chinese Academy of Agricultural Sciences (CASS) and an Elected Fellow of the National Academy of Agricultural Sciences (NASS) in India. Dr. Babu has served or currently serves on the editorial boards of several leading academic Journals including, Food and Nutrition Bulletin; Food Security; Agricultural Economics Research Review; and African Journal of Agricultural and Resource Economics. He completed his M.Sc. (Ag) in Agricultural Economics from the Tamil Nadu Agricultural University and B.Sc. (Ag) from Annamalai University, India. Dr. Babu received his Ph.D. and M.S. both in Economics from Iowa State University, where he was awarded the Outstanding Young Alumnus Award for his services to global development.

## Mr. Ram Bahadur KC, NARC

Dr. Ram Bahadur KC has spent the last 39 years involved in the agricultural research and development field. He is currently the Director, Crops and Horticulture Research, Nepal Agriculture Research Council (NARC). He has published 30 research articles. He has a Master's degree in Horticulture from the Institute of Agriculture and Animal Science (IAAS), TU, Rampur where his major subjects were Olericulture and Pomology.



## Dr. Krishna Raj Bajagain, Trade and Export Promotion Center, Government of Nepal

Biography and Photo Not Available

## Dr. AbduRahman Beshir, CIMMYT

AbduRahman Beshir has more than two decades of experience of getting better seeds and varieties to farmers. He works towards boosting farmer uptake of improved crop varieties by identifying ideal crop traits and strengthening seed systems.

Currently, he is working to strengthen seed systems across South Asia in close collaboration with government, national agricultural research systems, non-governmental organizations, donors, seed companies and other seed value chain actors. He primarily focuses on Nepal and Pakistan.

Beshir works with partners to fast track the development and deployment of market-ready products and scale up quality seed production of key crops in the region like maize, rice, and selected legumes and vegetables. He integrates farmers, researchers, and seed companies for the development of improved crop varieties and their subsequent adoption through robust and inclusive seed delivery pathways.



## Dr. Doug Buhler, Michigan State University

As Director and Assistant Vice President of Research and Graduate Studies, Dr. Buhler serves as the administrative leader of Michigan State University and AgBioResearch, a group of more than 350 researchers from seven MSU colleges. Buhler is a native of Wisconsin and received his Ph.D. from the University of Nebraska. He joined MSU in 2000 and has twice served as the interim Dean of the College of Agriculture and Natural Resources.

Dr. Buhler has over 330 publications including 130 refereed journal and review articles. He is the author or co-author of three books. He is a fellow of the American Society of Agronomy, Crop Science Society of America, Weed Science Society of America, and North Central Weed Science Society. He serves on numerous boards and advisory panels including the Foundation for Food and Agriculture Research, the Center for Food Integrity, the Michigan Grape and Wine Industry Commission, and the Michigan Crop Improvement Association.



## Dr. Rajendra Darai, NARC

Dr. Rajendra Darai was born in 1971 as a first son of Mr. Buddhi Ram Darai and Mrs. Bimala Darai in Bharatpur Metropolitan City, Ward No. 15, Mangalpur, Chitwan, Bagmati Province, Nepal. Dr. Darai completed his School Leaving Certificate from Shree Rampur Secondary High School, Rampur, Chitwan, Nepal in 1988. Since he had a keen interest in agriculture, he studied it as a vocational subject. He enrolled in Tribhuvan University, Institute of Agriculture and Animal Sciences (IAAS), Rampur Campus, Chitwan, Nepal for higher secondary education in Intermediate of Science in Agriculture (I.Sc. Ag) and completed in 1990. Dr. Darai studied his bachelor's degree in agricultural science with elective Agriculture Extension Education from Tribhuvan University, Institute of Agriculture and Animal Sciences, Rampur Campus, Chitwan, Nepal and completed in 1993.

He enrolled in Postgraduate Program for the Degree of Master's of Science in Agriculture major in Agronomy at Chandra Shekhar Azad University of Agriculture and Technology (CSAU&T), Kanpur, UP, India (Under ICAR) in 2001 and completed in 2003.

He has enrolled for the degree of Philosophy of Doctor (Ph.D.) major with Plant Breeding and Genetics at Agriculture and Forestry University (AFU), Faculty of Agriculture, Department of Genetics and Plant Breeding, Rampur, Chitwan in 2015 and has successfully completed all the requirements for the Doctor of Philosophy in Plant Breeding in the year 2020. His dissertation is on "Genetic Variability on High Concentration of Grain Iron (Fe) and Zinc (Zn) Lentil (*Lens culinaris* Medikus sub sp. *culinaris*) Accessions in Terai Agro-Domains of Nepal".

He currently works as a Coordinator/Senior Scientist(S-4) (Grain Legumes Breeder) of Nepal Agricultural Research Council (NARC), Grain Legumes Research Program (GLRP) mainly focusing on grain legumes breeding improvement works (conventional, mutation and molecular breeding). Dr. Darai has published more than 55 research papers in international and national Journals, proceedings, and articles on production technologies in fact sheet, brochures, and booklets. In addition, he has successfully released 12 varieties of different grain legumes (Lentil-5, Mungbean-3, Blackgram-2, Cowpea-1, Rajma-1) for general cultivation to the farmers, cooperatives, and seed company during his 25 years' service tenure.



## Mr. Harish Devkota, KISAN II/Winrock

As an agriculture graduate, I got my M.Sc. in Seed Technology from the University of Edinburgh, Scotland, UK in 1991. Since then, I have been working on many development projects funded by DFID, DANIDA, GIZ, SNV, FAO, and USAID. Currently, I am working on the Knowledge-Based Integrated Sustainable Agriculture in Nepal (KISAN II) Project as Senior Agriculture Productivity Director.

I have more than 30 years of experience in the fields of food security, livelihoods, value chain development, and private sector-led market approach. I have explored, implemented, and coordinated a range of projects that focus on food security, inclusive business and livelihood development of small-holder farmers in partnership with government, non-government organizations, and the private sector.



## Dr. Mina Wasti Devkota, ICARDA

Mina Devkota is Agronomist in the International Center for Agriculture Research for Dry Areas (ICARDA), based in Morocco. She has more than fifteen years of research and development experience in the field of soil and agronomy with major focus on sustainable cropping system intensification and conservation agriculture based agronomic practices from different parts of the world (South and Central Asia, and MENA region). Born in Nepal, Mina pursue her B.Sc. (Hons) and M.Sc. in Agriculture from Nepal and Ph.D. in Agronomy from the University of Bonn, Germany with field research in Uzbekistan, Central Asia. Before joining ICARDA, she worked for CIMMYT as Systems Agronomist for about seven years based in Nepal.



## Ms. Carol Jenkins, USAID

Carol Jenkins is the Office Director for the Center for Agriculture-Led Growth in USAID's Bureau for Resilience and Food Security (RFS). As a career member of the United States Foreign Service with more than 20 years development experience in the field, she has had a diverse career working on issues around agriculture, food security, environment, and humanitarian assistance. She has served in Nepal, Malawi, Zimbabwe, Ethiopia, Uganda, and Bangladesh, and assisted with USAID's emergency Ebola response in Liberia.



## Dr. Bal Krishna Joshi, NARC

Dr. Bal Krishna Joshi is a Senior Scientist at NARC. His major responsibilities include conservation and management of agricultural genetic resources; molecular Breeding and Isozyme analysis, rice & buckwheat breeding, tissue culture; statistical analysis & computer management; journal and annual report publication. Dr. Joshi also spent nine years in the Biotechnology Unit at NARC as a Scientist. He was awarded Special Contributing Scientist in 2017 by NARC; Technology Award (National level) in 2016 by NAST; Most Outstanding Principal Investigator for Integrated Management System of Plant Genetic Resources in 2016 by AFACI, RDA, Korea.







## Dr. Tika Bahadur Karki, NARC

Dr. Tika Bahadur Karki is a Senior Scientist (Senior Agronomist) at Nepal Agronomy Research Centre under Nepal Agricultural Research Council (NARC). He has worked at different capacities under NARC since 1990. He has a Ph.D. in Conservation Agriculture from Tribhuvan University, Nepal and is co-advisor to 30 agronomy master's students. His expertise is in conservation agriculture in rice and maize based cropping systems and integrated hill farming systems.

He has published in over 50 international and national peer reviewed journals, authored four book chapters and many technical booklets and leaflets in Nepali version. He has also reviewed over 30 international journal articles and attended and presented papers at various international and national seminars and workshops.

## Dr. John Medendorp, Feed the Future Innovation Lab for Legume Systems Research

John Medendorp has worked in international development for over 40 years in a variety of leadership roles in Africa, Asia, and Latin America. He holds a PhD in Higher, Adult, and Lifelong Education with a Certificate in International Development from Michigan State University. John specializes in Food Systems Capacity Development, focusing mostly on organizational, institutional, and systems capacity development. John has managed and/or led 10 USAID projects in 25 countries including in all Feed the Future target countries focusing on capacity development. He has authored several articles, book chapters, and technical reports on topics related to capacity development.

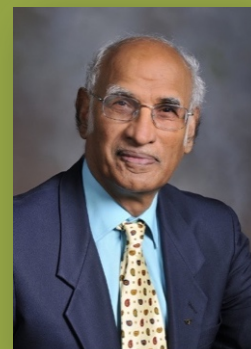


## Dr. Rajendra Mishra, Agri-Business Promotion Division, Ministry of Agriculture and Livestock Development

Biography and Photo Not Available

## Dr. Rangaswamy (Muni) Muniappan, Virginia Tech

Dr. Muni Muniappan currently serves as the director of the IPM Innovation Lab. This is a position he has held since 2006. As a world-renowned specialist in tropical economic entomology, biological control of insect pests and weeds, and integrated pest management, Muniappan has devoted his life's work to improving conditions for farmers in the developing world. He has made considerable contributions in the development of crop-specific IPM techniques, fostering partnerships with private sector organizations, encouraging scaling up through the dissemination of information, and promoting partnerships as a means of capacity building. Muniappan has also served in management positions for international scientific bodies and conducted international workshops in Africa, Asia, Europe, U.S.A., Central America, and Australia. Muniappan has co-written and edited three textbooks: *Biological Control of Tropical Weeds Using Arthropods* (2009), published by Cambridge University Press, *Arthropod Pests of Horticultural Crops in Tropical Asia* (2012), by CABI Publications, and *Integrated Pest Management of Tropical Vegetable Crops* (2016) by Springer. Moreover, while managing the IPM Innovation Lab, Muniappan has made time to mentor dozens of young scientists in developing countries, and to continue his own research—making discoveries about invasive pests and publishing his findings.



## Mr. Ram Krishna Neupane, FORWARD

BioMr. Ram Krishna is the Senior Program Manager, Program Director at FORWARD, Nepal, Chitwan. He previously served as Regional Director, Regional Agriculture Research Station, NARC, Nepalgunj. Other positions include Grain Legume Coordinator and Senior Scientist at NARC. Mr. Neupane has developed agronomy management technologies for lentil, chickpea, cowpea, soybean, mungbean, and pigeon pea. He acted as a collaborator in ICARDA, ICRISAT, AVRDC, and ACIAR/CLIMA projects in Nepal and selected crop varieties for farmer recommendation.



## Dr. Sandesh Neupane, University of Saskatchewan

Mr. Sandesh Neupane is a Ph.D. student in the Department of Plant Sciences, University of Saskatchewan, Canada. His research interests are in plant phenomics and genomics. His dissertation integrates digital phenotyping using multispectral aerial images and genomics in crop breeding by considering lentils as an example crop. He is originally from Nepal and came to Canada in 2016 to pursue his MSc in Plant Sciences with Prof. Kirstin Bett. His master's thesis included a phenological study of diverse lentil germplasm grown in multiple locations around the globe. After completing his degree, he worked at the same institute as a research assistant for two years. During that time, he worked with a multidisciplinary team of breeders, agronomists, bioinformaticians, and computer scientists to incorporate the latest technological developments, such as image-based phenotyping, in lentil breeding. He has (co)authored three journal articles related to lentil breeding during this time. Before coming to Canada, Sandesh worked in the agricultural research sector in Nepal for more than five years. His work in Nepal was focused on collecting and assessing the diversity of local crops, especially those which are neglected and underutilized. 'Ramechhap Hariyo Latte' as the first registered variety of Amaranth spp. in Nepal is an output example of this work there. He has good working experience with government and international, national, and local non-government organizations in Nepal and surrounding regions. He has worked in all three major agro-ecological zones in Nepal; however, he has spent more time in the high hills, in particular, Jumia.



## Dr. Barry Pittendrigh, Feed the Future Innovation Lab for Legume Systems Research

A previous Foundation professor at Michigan State University (MSU), Barry is the Director of the Feed the Future Innovation Lab for Legume Systems Research and an adjunct professor at MSU. He is also the John V. Osmun Endowed Chair in the Entomology department and co-Director of Scientific Animations Without Borders (SAWBO) at Purdue University. He has 20 years of experience in international development ranging from integrated pest management to scaling strategies for educational interventions at the last mile. He is the author of over 200 journal articles and book chapters and a former endowed chair professor at the University of Illinois.



## Dr. Devesh Roy, IFPRI

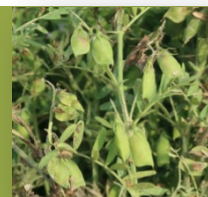
Devesh Roy, an Indian national, joined the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) in October 2017 as a Senior Research Fellow. Before joining A4NH, he had been a Research Fellow with IFPRI, where he had worked since joining as a Post-Doctoral Fellow in November 2004. He holds a Ph.D. in economics from the University of Maryland at College Park and a master's degree from Delhi School of Economics.

His areas of expertise include international trade, environment, firm farm linkages, and food safety. He has recently been involved in research related to economics of animal disease outbreaks. Further, he has been conducting research on issues relating to food safety in developing countries particularly from the demand side.



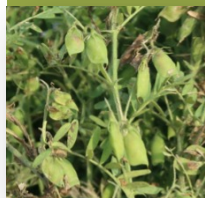
## Dr. Moin Salam, University of Western Australia

Biography and Photo Not Available



## Mr. Prakash Sanjel, Joint Secretary, Planning Division, Nepal Ministry of Agriculture and Livestock

Biography and Photo Not Available



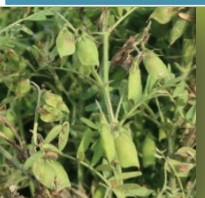
## Mr. Jason Seuc, USAID

Jason Seuc is assigned at USAID Nepal as the EG Office Director following a four-year assignment as Deputy Environment Office Director at USAID Indonesia. Jason's career has focused on balancing economic prosperity with environmental sustainability. In Indonesia, he led a portfolio that advanced low carbon and climate resilient development, agroforestry, conservation and fisheries management, disaster management, clean energy, water and sanitation, and solid waste management across the archipelago. He has also served in El Salvador and Bangladesh where he led environment, energy, and agriculture programs. Prior to joining USAID in 2010, Jason worked for a Miami coastal development firm managing hotels, beaches, marinas, and private island investments in South Florida and the Caribbean. Jason is from St. Louis and has a bachelor's and master's degree in Marine Affairs and Policy from the University of Miami.



## Dr. Govinda Prasad Sharma, Secretary, Agriculture, Ministry of Agriculture and Livestock Development

Biography and Photo Not Available



## Dr. Kiran Sharma, ICRISAT

Kiran Sharma is currently Director of the CGIAR Research Program on Grain Legumes and Dryland Cereals (CRP-GLDC) at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). He led as it's CEO, devising strategies for project/program planning and management, Agribusiness Entrepreneurships, public-private partnerships, and value-addition for nutritional enhancement to address malnutrition, hunger, and poverty through inclusive market-oriented development until Sept. 2021. Kiran also served as the Deputy Director General-Research at ICRISAT during May 2018 to December 2020.

With a PhD from the University of Delhi in Botany (Experimental Plant Morphogenesis), and post-doctoral training from the University of Calgary in Canada, Dr Sharma has over 30 years' experience in Cell, Molecular biology and Genetic engineering for crop improvement, performing multidisciplinary research with a thorough understanding of the global agricultural R&D trends, needs and challenges. Dr. Sharma has led several projects with multiple partners and has been proactively involved in policy and regulatory issues related to biotechnology and intellectual property rights in India and the region. He has over 175 publications with a H-index of 44 and citations exceeding 6,500. He has supervised several undergraduate and post-graduate students, and post-doctoral fellows in the area of Cell, Molecular Biology and Genetic Engineering besides providing mentorship to staff and students on Agribusiness and Social Entrepreneurship.

Dr. Sharma was also Instrumental in establishing the Platform for Translational Research in Transgenic Crops (PTTC) in 2007 that facilitates translation of genetic engineering technologies and proof-of-concepts to value added products. He played a key role in establishing an Agri-Business Incubator@ICRISAT (ABI) in 2003, that has won several accolades as a successful model for public-private sector partnerships and entrepreneurship development. ABI three other vertical on partnerships and nutrition led to the creation of an Agribusiness and Innovation Platform (AIP) at ICRISAT which has been operating as a self-sustainable model since 2007. His most recent engagement has been in the establishment of a Bio-Incubator (BioNcube) in 2017 to support startups in advanced biotechnologies. He also serves on several Government Committees on biotechnology, entrepreneurship development, agribusiness, and public-private partnerships.





## Dr. Rudra Shrestha, KISAN II/Winrock

Dr. Rudra Bahadur Shrestha is Enabling Environment Director in USAID's Feed the Future Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN II) since 2020. Before joining KISAN II project, he served as Senior Program Specialist (Policy Planning) for SAARC Agriculture Center (SAC), Dhaka, Bangladesh and led for strategic visioning and agricultural policy process in SAASRC eight countries. Dr. Shrestha has 2 decades of experiences in the Government of Nepal as a Senior Agricultural Economist, Cross-Sector Advisor for Global Food Security Strategy of USAID Nepal; Chairperson, Nepal Rice Working Group; Secretary General, Nepal Agricultural Economics Society; Visiting Professor in different universities. His area of expertise are agricultural policy and strategy development, food and nutrition security, poverty alleviation, agricultural transformation, family farming, rural revitalization, agricultural marketing, trade competitiveness, and value chain development. He published dozens of papers, policy brief, books, and book chapters.

## Mr. Prakhyat Jung Thapa, KISAN II/Winrock



Mr. Prakhyat Jung Thapa is a Senior Business Opportunities Manager in USAID's Feed the Future Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN II) since 2017. Mr. Thapa has more than 8 years of experience in Market System Development focusing on agriculture and livestock sectors, access to finance, insurance, GESI and ICT. He has worked in multiple projects of USAID, UKAID, and SDC and has conducted market assessments, developed strategies and interventions, established partnerships with private and public firms, and monitored the activities. He received his Undergraduate degree in Conservation Biology from USA and Master's in Development Studies from Nepal.



## Dr. Dil Thavarajah, Clemson University

Dil Thavarajah is an Associate Professor at the Department of Plant and Environmental Sciences at Clemson University. Dil is leading Pulse Biofortification and Organic Nutritional Breeding program. She co-leads the Phenomics of the Feed the Future Innovation Lab for Crop Improvement at Cornell University. Dil worked at the Canadian lentil breeding and biofortification program at the University of Saskatchewan, Canada, and started the national Pulse Quality and Nutrition Laboratory at North Dakota State University, Fargo, ND. Dil is internationally recognized as a leader in lentil biofortification, especially for iron, zinc, and selenium. Dil serves as an honorary visiting lecturer at, University of Peradeniya, Sri Lanka, and a key research partner to the *International Center for Agricultural Research in the Dry Areas (ICARDA)* to release biofortified lentil cultivars for Africa and Asia. Thavarajah holds a Ph.D. in Plant Science and MSc in Soil Science from the University of Saskatchewan, Canada, and a BSc in Soil Science from the University of Peradeniya, Sri Lanka.

## Mr. Subhas Raj Upadhyay



Subhas Raj Upadhyay is an Agriculturist & Managing Director of Lumbini Seed Company Pvt Ltd. located in the Lumbini Province of Nepal. The company was established in 2002 with the production and processing capacity of 2000MT per year and working with more than 1500 farmers who are linked to the company as contract seed growers, seed extension and promotion partners. Maize, rice, wheat and lentil are the major crops that the company produce and sales all over Nepal. Working for Government of Nepal for more than 20 years at various capacities, Subash decide to open a seed company to help farmers get good quality seeds within their zone of mobility and to help the country achieve seed security which is a basis for food security. The company is one of the pioneer seed company in initiating local hybrid seed production and marketing in Nepal and has a vision to export seeds to other countries in the future. Subash is passionate about working closely with farmers and he is interested to work and collaborate with all stakeholders who are working across the seed value chain in Nepal.



## Mr. Michael Weinraub, USAID

Michael works at USAID through the Feed the Future Knowledge, Data, Learning and Training (KDLT) activity as a knowledge and learning specialist. He works with the Center for Agriculture-led Growth, part of the Bureau for Resilience and Food Security, where he helps staff and leadership maximize collaboration through formal and informal learning design activities. Michael received his bachelor's degree in political science and philosophy from Binghamton University and went on to attain an M.A. in teaching English to speakers of other languages from Hunter College and an M.B.A. in human resource management from Pace University.