

Review of Current Agricultural Research, Teaching, and Extension in Nepal

(based on personal experience of 5-month sabbatical in Nepal)



Megha N. Parajulee

Professor, Faculty Fellow, and Regents Fellow

Texas A&M University AgriLife Research and Extension Center

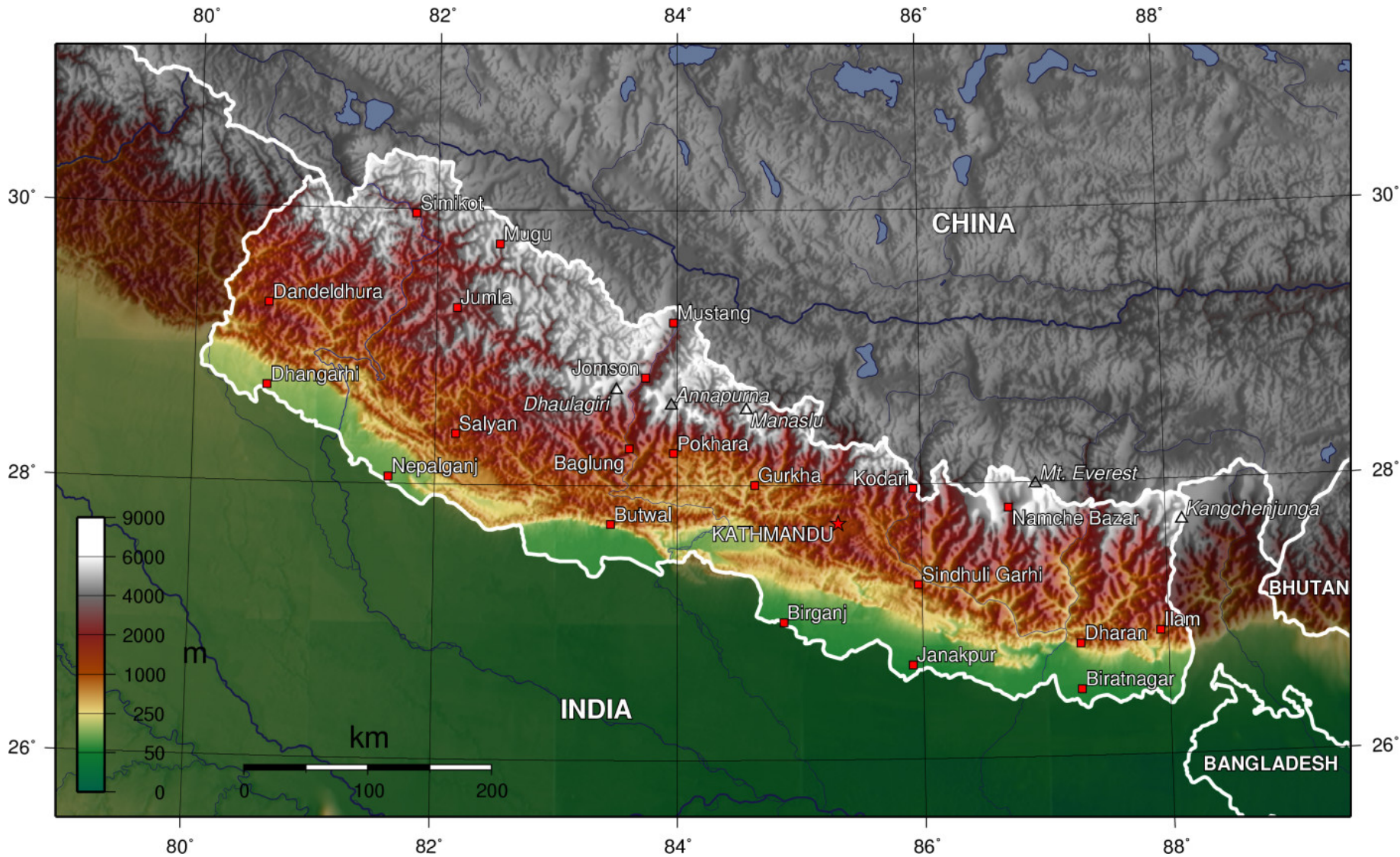
Lubbock, Texas (m-parajulee@tamu.edu)

NAPA First General Assembly,

May 28, 2016, Dallas, Texas

Questions

- What is the current state of agriculture (and agriculture education) in Nepal?
- Have we made significant impact in agricultural mindset in Nepal (subsistence, non-commercial farming) in the last five decades?
- Modern technological advancement in agriculture
 - compatible with Nepal's current state of agriculture
 - manpower development
 - required input to utilize the modern technology
- Should Nepal still adopt the slogan of *Krishi Pradhan Desh* for country's development?



Incredible Geographic Variation for the Size of the Country!

Terai (Plains) region, Elevated flatlands and hills, Mountain region

Diverse Crop/Animal Agriculture



- Rice, corn, wheat
- Millet, barley
- Legumes and oilseed crops
- Tree fruits and vegetables
- Other crops
 - Tea, coffee, spice
- Diverse animal husbandry

Incredible opportunities for ecological research

Agriculture Teaching

Agriculture University/Institute

- **Tribhuvan University/Institute of Agriculture (1972)** Rampur, Kathmandu, Lamjung, and Paklihawa
- **Himalayan College of Agricultural Sciences and Technology (2000)** Kathmandu
- **Agriculture and Forestry University (2010)** Rampur and Hetauda



Agriculture Teaching

Agriculture University/Institute



Agriculture Research/Outreach

Department of Agriculture

Government of Nepal/Ministry of Agriculture

(what tangible services have been delivered to farmers?)



Agricultural Research/Outreach

Agro-Financial Institutions



Agricultural Research/Outreach

Nepal Agriculture Research Council



An autonomous agricultural organization established in 1991 (under the Agriculture Ministry)

- To conduct qualitative studies and research on different aspects of agriculture
- To identify existing problems in agriculture and find out the solution
- To assist government in formulation of agricultural policies and strategies



NARC
Nepal Agricultural Research Council



कृषि मूलश्च जीवनम्
नेपाल कृषि अनुसन्धान परिषद्





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Agricultural Research/Outreach Non-Governmental Organizations (NGO/INGO)



Forum for Rural Welfare and Agricultural Reform for Development
(FORWARD NEPAL)

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Talk Program on Climate Change

Prof. Dr. Megha Nath Parajulee has presented his expertise on Climate change. FORWARD Nepal has organized talk program on the Climate Change. The participants were representatives of Government agencies, NGOs, DDC, Chairperson, Executive Director, Program Director as well as staff members of FORWARD Nepal were attended the talk program.



An over view of climate change scenario and its potential positive and negative during the talk. In the beginning, he elaborated on the entomological research the management of important insect-pests. In the context of climate change ef for preparation of climate change adaptation and mitigation plans at the local l



**Impact of Global Warming on
Agricultural Pest Management and
Biotechnological Advancement**

Collaborative Opportunities

- **Several NGOs/INGOs engaged in agricultural/cropping system research**
- **Nepal Agriculture Research Council**
- **Agriculture universities and colleges**
- **Helvetas, FAO, World Bank, USAID**
- **Private industries (seed companies)**

Current State of Agriculture in Nepal

- **Farmers are highly progressive; commercial agriculture (vegetable)**
- **Lack of input variables (fertilizer, seed)**
- **Storage and Marketing**
- **Crop Insurance, Price stability, and Government incentives**
- **Agriculture policy**

Current State of Agriculture Education and Service

- **Political interference has hindered the quality education**
- **IAAS has been displaced from Rampur, but the new AFU has not gained any traction**
- **HICAST has failed to develop itself into an international level agriculture institution**
- **Coordination amongst universities and government agricultural institutions is weak (Individually they seem to be doing well)**

Agriculture Education and Service

My Current Views

- **Agriculture manpower is quite sufficient (quality could be improved/synergism amongst expertise)**
- **Strong network of agricultural specialists amongst university, NARC, GON/Agriculture Department, private industry, NGOs**
- **Coordination among teaching, research, and outreach is lacking (potential)**
- **High officials in every agricultural sectors in Nepal are connected to Rampur (unifying variable)**

Potential Role of NAPA in Agricultural Development in Nepal

- IAAS alumni (role could be more direct)
- Nepal Ph.D. Association – Life member and ambassador for North America
- Lobbying for appropriate agriculture policy
- Build disciplinary working networks with Nepal's agricultural institutions
 - Crop production/breeding
 - Crop protection
 - Economics and marketing
 - Agriculture policy

Example of Potential Service at the Policy Level



United States Department of State
Bureau of Educational and Cultural Affairs
Washington, D.C. 20037
www.state.gov

March 17, 2014

Dear Mr. Parajulee:

The U.S. Embassy in Uzbekistan has the honor invite you to Tashkent April 20-27, 2014.

Your visit will take place prior to the Joint Committee Meeting on science and technology (JCM). The purpose of this JCM is to draft a joint U.S.-Uzbek action plan for science cooperation over the next two years, focusing on three main areas: agriculture and biotechnology, renewable energy and energy efficiency, and evidence-based medicine. Your research may be of interest to the agriculture/biotechnology working group, which is led by USDA/ARS's Director of International Research Programs, Dr. Ibrakhim Shaqir, with whom you have already been in contact.

The Embassy is coordinating with the Ministry of Foreign Affairs of Uzbekistan to organize a schedule for your visit to include meetings and roundtable discussions with

Possible NAPA Engagement with Government/Ministry Level Discussions

- Policy formulation
- Creating a mutual trust between Nepal's policy makers and diaspora
- Creating an environment for diaspora to engage in national development (investment/technology transfer)
- I have asked relevant institutional heads to have such interactions during my stay in Nepal
- However, there seems to be some hesitancy in accepting such proposals.

Nepal's agriculture sector has much improved, but it needs realignment of priorities, effective collaboration among institutions, networking with vast human resource outside the country, and have the right agriculture policy considering its geopolitical constraints.

