

Agri-Connection

Vol 2, Issue 1, March 2017



A quarterly newsletter of the Association of Nepalese Agricultural Professionals of Americas (NAPA)



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Message from the President

Greetings and best wishes for a 'Happy New Year 2074'



We are delighted to offer you the third issue (Vol. 2, Issue 1) of our quarterly newsletter '*Agri-Connection*' (AC). I am proud to say that members and readers are receiving updates regularly through '*Agri-Connection*.' Similarly, NAPA researchers have shared their research (as research notes), literary works and more to the larger community.

I take this opportunity to wish a very happy and prosperous 'New Year 2074 BS' to all NAPA members, well-wishers, readers, potential members, and the agricultural community around the globe. I am extremely pleased to share that our dedicated team is working relentlessly to serve the community through educational, scientific, and developmental initiatives (please see our first year achievements in the section entitled "A Year of NAPA Existence"). As of March 31, 2017, the number of NAPA members has reached 151 and many more potential members are inquiring about NAPA. Our Membership Drive Committee (MDC) is constantly reaching out to them. Thank you MDC team for your tireless hard work.

NAPA is growing steadily due to our unwavering collective effort. We have Membership Drive (MDC), Student Coordination (SC), Information and Technology (IT), Agri-Connection Editorial, and By-laws Review Committees are already in place volunteering from their end. Similarly, Working Paper Series, Journal, Policy/Research Brief, and Book Publication Committees have started their ground work. I am delighted to bring to your kind information that NAPA is launching a book publication project. The publication team is working hard to publish a book entitled, "**Sufficient, Safe and Healthy Food in Nepal: Principles and Practices**" (book title yet to be finalized).

Contd.

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Similarly, a large number of members and non-members are benefited from NAPA Technical Talk Sessions. Thank you to the NAPA experts who have been and continue to be available to share their expertise and experiences to our valued members. I am confident that NAPA will be able to continue this program in varied areas of agricultural and allied disciplines for the benefit of our professional community.

Additionally, we are working towards establishing an Endowment Fund to serve NAPA community. Contribution to the Endowment Fund may be in the form of Diamond/Gold/Silver/Bronze sponsor. Moreover, you will also have an opportunity to establish a scholarship in your own name and/or in the name of your beloved ones. NAPA Distance Teaching Project(s) has been started on a pilot basis in Nepal. An expert roster is being prepared to share your expertise.

A **Global Agricultural Summit (2017)** to be held in Nepal is under discussion. More importantly, NAPA is going to organize its first ever scientific conference in 2018. Please mark your calendar to participate in a fun-filled **First NAPA Biennial Conference to be held during the Memorial Weekend Holiday (May 26-27, 2018) in Oklahoma City, Oklahoma, USA**. Our valued members will have the opportunity to share their scholarly works through presentations (oral and poster), renew and build personal and professional networking, and simultaneously strengthen your professional leadership.

On behalf of the Executive Committee, I would like to thank all the dedicated and hardworking members for contribution to heighten NAPA's identity and scope in the Americas and beyond. May I appeal to all members to communicate with at least one potential member in your network to join 'NAPA' for a common goal that can be achieved through collective action? ***Your voluntary contribution to expand NAPA is highly appreciated and will be recognized at the upcoming First NAPA Conference in Oklahoma, USA.***

Finally, I am highly appreciative of the **Agri-Connection** editorial team, contributors, and members for hard work and dedication to bring this issue out on time. Together we can make a difference.

Lila B. Karki

**HAPPY
NEW YEAR
2074 BS**



**नयाँ वर्ष २०७४
को हार्दिक
मङ्गलमय
शुभकामना**

Association of Nepalese Agricultural Professionals of Americas
Wishes Everyone a Happy New Year 2074.
NAPA Executive Committee (2016-2018)



 Dr. Lila B. Karki President	 Dr. Megha N. Parajulee Vice President	 Dr. Prem Bhandari General Secretary
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Tinkering with Environmental Ethics

Gopi Upreti, Booze Allen, Virginia



Why do we need environmental ethics?

The interface between environment and normative philosophy is an area that needs thoughtful consideration from the perspective of maintaining equilibrium between nature conservation and human behavioral conduct. Environmental ethics attempts to work in the interface between environmental space and the normative philosophy of existential life phenomenon. The environmental problems that have resulted from destruction of biological diversity and the vital life support system of natural ecosystems (soil, air, land and water) all over the world cannot be overemphasized. Environmental problems have not only generated tremendous awareness and affected the outlook and world views of a large number of people in society, but also affected scientists and philosophers and their world views likewise in academia. Environmental ethics is essentially a humane response to a range of environmental problems which collectively make up today's environmental crisis. Humans are largely responsible for the damage to the environment. What makes it wrong is not only too much of anthropocentric interest that is deeply rooted in individual self-aggrandizement, which sequesters natural resources, but also the wanton destruction of nature itself, including species, ecosystems, and wilderness, which have their intrinsic values. *It is important to realize that environmental destruction is an immoral act because it undermines the security and survival of all life forms including human beings.*

Moral values and cognitive beliefs of a culture play a major role in human adaptation to the natural environment. Constellation of such belief systems determines what kind of political and economic systems societies want to create and maintain. The root causes of today's environmental problems lie in contemporary *dominant belief* structures, which organize the way people perceive and interpret life and the way the world functions. Perhaps, first task ethics should perform is to *understand* and *evaluate* moral codes, dominant assumption, and value systems woven into the culture and worldview of the society, particularly what they are and how they function to enhance or distort the relationships of human beings to one another and to nature.

The most interesting aspect of our natural and social world is their constant interaction, which mutually affect changes in each other and evolve a relationship in a new state of social reality. Human beings are both actors (subject) and a part (object) of this *dialectical* (interactive) process of social and natural dynamism wherein they have to constantly recreate, redefine, and reestablish themselves with the changing social and natural systems (contexts). The dialectical process leads to a new relational state where dominant social world views become no longer functionally relevant and lack explanatory power. These need to be replaced by new and relevant, powerful and adaptive world views that provide a better perceptive and interpretative framework. Consequently, new values, beliefs and normative philosophy evolve to guide human actions and behavior. Systems ecology, evolutionary biology, political economy and normative philosophy have always attracted mankind's intellectual motivation and curiosity but the difficulty they have faced is the development of practical strategies to mold and affect human behavior to translate these perspectives in the real life circumstances of ordinary people. The challenge for political economists, philosophers, social scientists, system ecologists, environmentalists, natural resource scientists and development practitioners is to work out appropriate ethical development frameworks in the interface area between natural systems and human society. *Such development framework can only be evolved if we use the knowledge and understanding of sciences within the framework of moral philosophy to solve environmental and social problems so that resource development, management strategies and development policies can be designed on sound ecological and moral principles ensuring the greater sustainability of growth and development.*

Dominant development paradigm

It is held that there is something radically wrong with the planning and decision making processes involved in the modern development drama of nation states. This is generally attributed to conceptual inadequacies among participating professional groups and politicians who control the development processes. The world view within which scientists and development practitioners are trained is said to be largely responsible for this. The *paradigm* involved has been variously labeled as *positivist*, *reductionist*, *compartmentalized* and

so on. It is characterized by a single and very narrow vision, which reflects inability and unwillingness to look beyond one's narrow specialization and sphere of responsibility. Critics of this paradigm argue that professionals of all kind need to be trained in a different *cognitive paradigm* which puts more emphasis on *synthesis, participation, and interconnectedness* rather than on prevailing reductionistic analysis, manipulation and domination. This new paradigm is often called *holistic* or *integrative thinking*. While the development of system approach and multidisciplinary research programs have propelled changes toward integrative thinking, this is still far from becoming the dominant mode of thought in sciences and development practices.

It is important to realize how the *reductionistic* mode of thinking in science and development practices affects our understanding of the environmental problems in general, and development practices, in particular. We need a conceptual framework that clarifies the distinction between reductionistic and integrative thinking and also provides guidelines for developing holistic or integrative thinking. The long range goal of development practitioners is to get actively involved in development processes based on appropriate development ethics. The reductionistic approach in development promoted unhealthy competition and desire to dominate nature and control resources instead of promoting sustainable use of resources, cooperation, equity and social justice. This approach has been negatively anthropocentric and also negatively ecosystemic. It is negatively anthropocentric because the consequences of this approach have done more harm than good. It is negatively ecosystemic since it does not recognize the fact that existence of all life forms, including humans, depend directly upon the health and integrity of natural ecosystem. The prevailing world view is a major source of today's human and environmental problems that must be replaced by a new ethical view that nurtures the notion of diversity, health, and integrity of ecosystem in which each species including *Homo sapiens* is a member of a highly interactive community of interdependent systems in the biosphere and each species has its own value.

Normative values

It is in this context that the role and significance of normative philosophy becomes crucial in providing a coherent and integrated view of human knowledge systems that form the basis not only for the perceptual and interpretative framework for worldly phenomena, but also the moral framework for development practices and human conduct. It does not content itself with the appearance of a thing, it goes much deeper into the matter and examines the origin, nature, meaning, unity and relationships among things and their inherent contradictions and finally, it seeks humankind's role and place in them. It takes account of scientific facts and also provides value judgment needed for normative interpretation of those facts. *Environmental ethics, the growing normative discipline within philosophy, not only offers a great opportunity to inspire, and sustain environmental movements growing all over the world, but also has a great potential to provide pragmatic human behavioral norms to guide human activities and conducts in the process of mankind's struggle for survival in their daily existential life situation.*

For development professionals, primary goal and also the major challenge is to develop an appropriate framework of development ethics from which to design and pursue development strategies for achieving *environmental* and *social sustainability*. This requires a profound knowledge and understanding of how natural and human systems interact with each other and how such interactions change them and determine the nature of their being. Environmental ethics that embraces ecological principles of diversity, stability, interconnectedness and synergistic pluralism provides a basis for sustainable development. The task is to re-establish mankind's relationship with nature, which cannot be done without rupturing the mechanistic reductionism and replacing it with a paradigm grounded in normative philosophy that values environment (natural resource base) as a very basis for the survival of all living beings, including humans. *If the development professionals and politicians do a little tinkering with environmental ethics before passing their judgment on the subjects that have great implications for mother Earth and the future generation, they would definitely contribute to the making of a better world, a world in which both mankind and biotic community can co-exist and flourish together.*

Disclaimer: The views expressed in this article are of the author and do not necessarily reflect the official views of the Agri-Connection editorial board or that of NAPA.

Exploring collaboration

On January 3, 2017, NAPA President Dr. Lila B. Karki and General Secretary Dr. Prem Bhandari met Dr. Binayak Rajbhandari, Chair, Himalayan College of Agricultural Sciences and Technology (HICAST)

(<http://www.hicast.edu.np/>). The meeting was fruitful regarding potential collaborative areas between HICAST and NAPA.

From left: Bidur P. Chaulagain, Prem Bhandari, Binayak Rajbhandari, Rewati Man Shrestha, Lila B. Karki, Krishna B. Shrestha and Bishnu Bhattarai



Drs. Karki and Bhandari also met various agricultural professionals and shared information about NAPA and its future. They also discussed about possible collaboration with agricultural professionals and institutions in the future for the development of agricultural sector in Nepal. The dinner meeting was held at Bhojan Griha, Dillibazar. The group thanks Dr. Vidur Ghimire and Mr. Ratna Karki for organizing the event.

Front row (from right): Laxmi N. Sah, Man Mohan B. Shrestha, Ratna Karki, Nir Bahadur Jirel and Yogendra K. Karki

Back row (from right): Kiran Ojha, Punya P. Regmi, Badri Aryal, Lila B. Karki, Agni Nepal, Sarba R. Khadka, Kamal Sah, Vidur Ghimire, Raju Khanal, and Prem Bhandari

On February 15, 2017, Dr. Megha N Parajulee, NAPA Vice President, provided a brief overview on "Prospects of Collaboration with Nepal's Agricultural Stakeholders through the Association of Nepalese Agricultural Professionals of Americas" at the Agriculture and Forestry University (AFU), Nepal. The program was attended by Prof. Dr. N.R. Devkota, Research Director, faculties, staff and students.



Your Contribution to NAPA is Tax Deductible

Founded in 2016 and incorporated (Certificate ID: 10668534#BRK73) under the laws of the Secretary of State of the State of Louisiana (LA), USA, NAPA is a non-profit, non-governmental, non-religious, and non-political professional organization dedicated to serve mankind through educational, scientific, and developmental initiatives. NAPA was officially registered on January 6, 2016. Effective January 6, 2016, Internal Revenue Service of the United States government has determined NAPA as an entity exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Now any contributions made to NAPA is tax deductible under IRC Section 170.



Progress Review: A Year of NAPA Existence

Lila B. Karki and Prem B. Bhandari



On January 6, 2017, NAPA celebrated its first anniversary. A long awaited void of an association/forum of Nepalese Agricultural Professionals of Americas (NAPA) was filled on January 6, 2016 in Louisiana. A team of 17 committed working committee members (<http://www.napaamericas.org/working-committee.php>) contributed relentlessly to make this a reality. We would like to congratulate all the members and beyond for your direct and indirect support to make this happen. We would also like to acknowledge the contributions of each and every individuals and previous committees that encouraged us to come thus far.

While NAPA is still in its infancy, we have made a significant progress towards realizing its goals within this first anniversary. The first elected Executive Committee (EC) of 11 members began to lead NAPA as soon as it was officially installed on May 27, 2016. To ensure that the organizational functions are adequately and efficiently addressed, several committees have been formed. These committees include:

- Membership Drive Committee (MDC)
- Student Coordination Committee (SCC)
- **Agri-Connection** (a quarterly newsletter) Editorial Board
- By-laws Review Committee
- IT (information technology) Committee, and
- Committees for the publication of Working Paper Series, Wikipedia, Research/Policy brief, and NAPA journal are in progress. Committee members are working extremely hard to expand NAPA to an even wider audience.

As we celebrate our first anniversary, few milestones are highlighted here to indicate what is possible to achieve in a short time frame through the collective effort of all of us. We feel proud to share the progresses made within this first anniversary as listed below:

- Organization of the first AGM in Dallas, Texas in May 27, 2016.
- NAPA received [501 (c) 3] federal tax exemption status from IRS.
- Membership increased from 88 to 142 since the installation of first Executive Committee.
- An informative website (~6,800 visits in a year) with option for online membership/donation payment.
- NAPA's introductory brochure is in place.
- Two issues of **Agri-Connection** (a quarterly newsletter) released.
- The first issue of Policy/Research Brief is in progress.
- The first issue of 'Working Paper Series' is underway.
- NAPA Expert Roster is being prepared.
- Three Talk sessions organized.
- Member support for flood relief (\$4,428.00) and fatal car/vehicular accident (\$1,260.00).
- A balance of ~\$9,000.00 in NAPA account.
- Expansion of membership and scope to global audience, Canada, Nepal and Mexico.
- First scientific conference scheduled from **26-27 May, 2018** in Oklahoma, USA.
- Proposals for establishing NAPA Endowment Fund, NAPA scholarships, Online teaching, Research collaboration, and Global Agricultural Summit under discussion.
- Future activities for professional development being planned.
- Initiatives for collaboration with several institutions/organizations in Nepal underway.

On behalf of EC, we would like to thank all the hardworking NAPA members for your dedication and commitment to heighten NAPA's identity and scope in the Americas and beyond.

Finally, we would like to appeal to all potential members to join the unique professional organization 'NAPA' and volunteer to this organization for a common goal that can be achieved through collective strength. Your voluntary contribution to expand NAPA is highly appreciated and will be recognized at the upcoming first NAPA conference in Oklahoma, USA.

Association of Nepalese Agricultural Professionals of Americas (NAPA) Schedules



Where?

Biltmore Hotel Oklahoma
401 S Meridian Ave
Oklahoma City, OK 73108

How to contribute?

Participation in paper/poster presentation, panel discussion, scientific sessions, and more

Please mark your calendar to be a part of this historic conference with hundreds of Nepalese Agricultural Professionals and beyond.

For more information, visit:

<http://napaamericas.org/>



Increasing Market Access in Rural Areas to Reduce Food Insecurity in Nepal*

Akriti Bhattarai¹ and Gandhi Bhattarai, Ph.D²

¹Glastonbury High School, Glastonbury, CT and ²OptumInsight, Rocky Hill, CT



Background

Food security is a serious issue in Nepal. Nearly 38% of the Nepalese population is considered food energy deficient (National Planning Commission, 2013). With a Gross National Income (GNI) per capita of \$730 per year, the average family has a very limited income to indulge in balanced diet (World Bank, 2015) creating a situation in which the health and wellbeing of a large population is at a higher risk for diseases and infections.

Agriculture is the traditional way of life in Nepal, whether it is farming, livestock production or food processing. Even though the agricultural sector contributes 1/3rd of the GDP, Nepal remains net importer of food due to low agricultural productivity (Smith, 2009; Karkee, 2008). Production is concentrated to isolated pockets with a limited access to market. Most family farms are of subsistence nature with <0.5 ha that produce barely enough for survival (Karkee, 2008). Whatever a family is unable to produce must be purchased from local markets, which are inadequate in terms of products. Lack of infrastructure is a major factor impacting market access, and subsequently, food security in Nepal.

Unique production zones and challenges of access to food

Nepal has three distinct geographical regions – the Terai, central hills, and mountain region, which offer unique production potential. The moist soils and favorable climate in the Terai region are perfect for growing rice, pulses and cash crops, such as oilseeds and sugarcane. The varying climates of the central hills are suitable for a wide variety of terraced crops including corn, wheat and rice. Temperate fruits and vegetables are abundant in this region. The rocky land and high elevations of the mountain region limit cultivation to a handful of hardy grains and staple foods, such as barley, buckwheat and potatoes. However, abundant pasture makes it more suitable for raising livestock such as mountain goats, sheep and hill cows.

The level of food insecurity varies regionally due to varying agricultural productivity and infrastructure. The difficult topography poses significant challenges for creating road networks and market access in the hill and mountain regions. The lack of reliable electricity and usable roads makes storage and transportation of crops from areas of surplus to areas of need incredibly difficult. Production shortages and scheduled blackouts of electricity hinder the development of markets and storage facilities. Natural occurrences like landslides, flooding, and drought damage crops and drive up food prices. Most rural farmers are not able to invest in new equipment, irrigation systems, fertilizers, and improved seeds to increase their production. Without proper investment in infrastructure development, the situation will only continue to worsen. Attention should be given to building and maintaining transportation infrastructure, increasing the production and distribution of electricity, and promoting mechanization in agriculture industry. Providing access to improved market for both the producers and consumers will increase production and enhance productivity.

A strategic investment in infrastructure development

An investment in road infrastructure today will have a long-term impact on the food security in the years to come. Most rural roads are unpaved and seasonal with just the gravel or compacted dirt that can wash away or turn into mud during the monsoon season. Delivering products from areas of surplus to the market is a struggle when roads are unusable or non-existent. This adds to per unit production costs through transportation loss, added expenses, and the opportunity cost of labor that could be used in production. This cuts sharply into the operational margin of the poor farmer and provides no incentive to invest in production technology. Road access will reduce the time and labor needed to transport produce to the market and lower production costs. This will increase the return to an average smallholder farmer and household income (National Planning Commission, 2013). Fewer risks, smaller losses, and cheaper transportation cost makes food more affordable and promotes consumption.

Construction work is time consuming, limiting the rate at which road access can be improved. Recently, the Rural Access Program has shown the potential of being incredibly beneficial by involving more local people in the construction and maintenance of roads. By working with local governments and the Department of Local Infrastructure and Agricultural Roads, they have gained continued support and cooperation. In addition to road construction and maintenance from outside help, the local people are encouraged to become more involved. The program provides vocational training and creates temporary employment for the people as they assist in road work (“RAP 3 Overview,” 2013). With this training, they will have the knowledge necessary to lead their community in maintaining their new road system even when the project has moved on to another location. The idea that the roads are a community responsibility should be promoted, and more funding should be allocated for training a few people in basic construction and leadership skills. In very

remote areas, even constructing a common access point for a cluster of villages would be tremendously helpful as food can still be transported to the general area to be sold at local village markets and exported out when there is a surplus. Construction of major hydropower plants also requires access to the area by road for flow of materials. Once opened to the public, these roads allow access to goods and services, which leads to development in areas previously left alone.

Large scale hydropower generation is extremely slow in Nepal. This ongoing problem could be resolved by a wide scale micro hydropower projects with a focus on plants with higher production potential. In 2007 Nepal's Alternative Energy Promotion Center began a project with support from the World Bank to construct micro hydropower plants in rural villages. These power plants produce energy for a small group of surrounding villages, and are constructed and operated by villagers themselves. These power plants promote new businesses as well as a more sustainable lifestyle. With a cheaper and more reliable light source, villagers have more productive time at home. Electricity allows them to operate new machinery to produce higher quality products in their homes and businesses (World Bank, 2014). Larger plants could produce surplus energy that can be sold to the Nepal Electricity Authority for distribution in its nationwide network. This would generate more income for the villages to pay back loans required to construct larger facilities.

Electricity production would allow for the operation of more advanced and efficient agricultural equipment, which increases productivity. Mechanized mills can process grains faster and more efficiently. Equipment for raising livestock can be utilized and meat can be refrigerated or frozen to extend their shelf life. Families can invest in refrigeration, allowing them to store more perishable foods and improve their diets (World Bank, 2014). Utilization of irrigation technology would be more widespread, reducing reliance on local weather patterns and losses during mild droughts.

A challenge of coordination

Increasing market access through infrastructure development requires support from multiple agencies and the cooperation of the local government, communities and individual families. International partners such as the USAID, various UN agencies, and the World Bank have organized and financed projects to help millions of Nepali people. Even so, more can be done to improve infrastructure that will provide access to food and assist Nepal in developing itself. No-interest loans from the World Bank and the United Nations Development Program would allow for the expansion of development projects. Since these projects strengthen the economy by increasing transportation and potential to export energy and agricultural products, these loans can be repaid in the future (IFAD, 2013). Visionary leadership and political stability is a must to make this a reality. The various departments of the government of Nepal need to work together to take a leading role in developing the country using the resources that it has. For example, the Department of Roads, the Department of Electricity Development, and the Department of Local Development should work together to find strategically important areas to invest. Nepal's Energy Authority and the Department of Electricity should be pushed to increase their involvement in rural electricity production as well as hydropower for the entire country.

Conclusion

Better roads, market and storage facilities, and technology are essential to increasing production and access to food in any country. Food security will only increase with the proper investments that will lead to long term improvements in agricultural production and productivity. These investments require the combined effort of many outside organizations, the government, and the people. Increased availability of input and better access to market for output will increase productivity, thereby improving food security. The potential exists for Nepal to be self-sufficient in food production, all we need is access to market.

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Member News, Publications, Presentations, and Awards

Member Relocation

Dr. Ramesh Khanal, chief editor of this newsletter, recently relocated to Lancaster, PA from Madison, WI to take up a new position. He loves and wishes to get acquainted with any NAPA member or even someone from Nepal living in the area.

Publications

Bhandari, Prem. 2017. "Rural Agricultural Transformation: Is Family Labor Availability an Obstacle for Labor-saving Farm Technology Use among Smallholder Farmers?" *Nepalese Journal of Agricultural Economics*. <http://www.naes.org.np/publications.php?id=1&pg=1>

Presentations and Awards

NAPA congratulates following members for their outstanding achievements. NAPA is proud of your accomplishments. Congratulations!

Sanjok Poudel. "Agriculture: Food for Life." Mr. Poudel, a graduate student at Tuskegee University, College of Agriculture, Environment and Nutrition Sciences was awarded the Third Place in Essay contest organized on the occasion of 2017 National Ag Day at Tuskegee University, Tuskegee, AL.



Lav Kumar Yadav. "Characterization of ankyrin gene family and other genes involved in capsaicin content and fruit weight in peppers." Mr. Yadav won the First Prize in overall graduate oral presentation at the Association of 1890 Research Directors' (ARD) Symposium (ARD 2017) in Atlanta, GA.

Bijesh Mishra. "Exploring the adoption of sustainable agriculture practices in Kentucky using negative binomial regression." Mishra won the Third Prize in overall graduate oral presentation at the Association of 1890 Research Directors' (ARD) Symposium (ARD 2017) in Atlanta, GA.



Amit Kumar Yadav. "Using early nutritional programming to enhance the utilization of plant based diets in fish (Large mouth Bass)." Mr. Yadav won third prize in overall graduate poster competition at the Association of 1890 Research Directors' (ARD) Symposium (ARD 2017) in Atlanta, GA.

NAPA members in the Association of 1890 Research Directors' (ARD) Symposium (ARD 2017) in Atlanta, Georgia

Following NAPA members attended the symposium: Dr. Uma Karki, Dr. Buddhi Gyawali, Dr. Tilak B Shrestha, Bijesh Mishra, Yuba Raj Kumar Karki, Ashmita Poudel, Sushil Nyaupane, Nabin Sedhain, Srijana Thapa Magar, Rohit Ranabhat, Amit Kumar Yadav, Lav Kumar Yadav, Dr. Lekha Nath Paudel, and Dr. Lila B. Karki.





N A P A

Association of Nepalese Agricultural Professionals of
Americas

Proudly announces the upcoming

Talk Session on

Changing Gender Role and Future of Agriculture in Nepal: Challenges and Opportunities

By **Dr. Bimala Rai Paudyal**

When: NEPAL: Saturday, April 29, 2017 [USA: FRIDAY, APRIL 28]

Time: NEPAL TIME 8:00 AM, Saturday [USA TIME 10:15 EST, FRIDAY, APRIL 28]

How to Join the Session?

Dial-in Free Conference Call Number: 641-715-3580, Access Code: 113245#

Respected NAPA members
and beyond
Greetings!

I cordially invite you to attend
the upcoming NAPA's **FOURTH**
talk session. Please do not miss
the opportunity to interact in a
live discussion forum on one of
the most challenging issues
'Changing gender role in
sustaining agricultural
development' in the context of
developing countries.

Together, we can make a
difference.

Respectfully,

Lila B Karki, PhD
President, NAPA

Presenter



Nepal's women work at much higher levels than women in some of the other South Asian countries. Agriculture sector is the main employer for majority of Nepalese women, but more than three-quarters (76%) of women engaged in this sector are still unpaid. This remains as one of the major disincentives for women to still engage in agriculture.

Meanwhile, the world of work, including in agriculture, is changing rapidly. Climate change, globalization, migration and technological advances for example, bring tremendous opportunities as well as challenges with significant implications on gender roles and women's life.

Against this backdrop, **Dr. Paudyal, Former Member of National Planning Commission, Nepal** shares her thoughts on what incentives exist for women in Nepal to still engage in agriculture, what are the implications of changing world of work for women, what opportunities exist and where are the challenges that need to be addressed in order to secure agricultural development in Nepal.



**विषरहित भण्डारणमा कीरा नियन्त्रण
पीताम्बर दाहाल**

विष रहित भण्डारण गर्ने, ज्ञान सीप छ रे
ध्यानमग्न भई सुन्नु सबै, कटु सत्य हो रे
मंसिरका अन्नगेडा, धेरै चीसा हुन्छन
ढिकुटीमा चीसो राख्दा, दुसी कीरा रन्छन

पन्ध्र प्रतिशत उँभो पानी भए, दुसी रमाउँछ
दशदेखि चौध प्रतिशत सम्म, कीरा मौलाउँछ
चौध प्रतिशत पानीमात्रा, धानमा राख्न सक्दा
ढिकी मिलमा कुट्दा धान, चामल बन्छ सगला

बीउको लागि दश देखि बाह्र प्रतिशत सम्म,
पानी मात्रा हुनुपर्यो, प्राण बचाउन हम्म

दुइचार पल्ट अन्न, घाममा सुकाएर
ढिकी मिलमा कुटने, अवस्था बनाएर

हावा बन्दी बोरा खोजी, अन्न टम्म राख्नु
डोरी खोजी बोरा घाँटी, ट्याप्प पारी बाँध्नु
एउटा बानी बदल्ने, मौका आयो मान्नु
हावादारी बोरामा त, अन्न न राख्नु
बोराभिन्न हावा पानी, नछिर्ने पो गरी
दबाईको प्याकिग जस्तै, अनाज राख्नु बरी

चैते अन्नहरु भने, अति सुखा हुन्छ
हावा बन्दी बोरा खोजी, प्याकिग गरे पुग्छ

बढी चीसो बन्दी भए, बीउ छिट्टै मर्छ
ओषिलो अन्न प्याकिग गरे, दुसी विष पाछै

दशदेखि चौधसम्म, पानी मात्रा हुँदा,
बन्दिभका कीरा मर्छन्, अक्सिजन कम हुँदा

पानीमात्रा यकिन गर्ने, सरल युक्ति के हो ?
कृषि विज्ञ प्रष्ट पार्नु होस, असली ज्ञान छ हो ?

वर्षा याममा सुकाउन, पक्कै गारो पर्छ
तेही गार्हो ज्ञान सीप, चाँडै सामु आउँछ

कोल्डस्टोर नचाहिने, नौलो ज्ञान यो हो
बुद्धस्थलमा प्रयोग भाको, सरल उपाय हो

सुखा अन्न बिगार्ने त, पानी पो रहेछ
बिष विना कीरा मार्ने, सरल पो भएछ



**कृषि
प्रतिभा पौडेल आचार्य**

जीवको सृष्टिसँग नै कृषिको जन्म भैदियो
जंगली सभ्यतालाई बिकसित गरिदियो
बाँच्दैन प्राणी पृथ्वीमा बिना अन्न कसैगरी
महत्व कृषिको के छ बिदितै छ सधैंभरि

कसरी हुन्छ आमदानी थोरै लगानीबाट नै
पर्यावरण हाम्रो यो स्वच्छ पारौं भनेर नै
बनेछ "कृषि चौतारी" कृषि मै खोजी गर्नुछ
प्रबिधि उच्च पैल्याई कृषि कै ज्ञान छन् छ

आधार कृषि नै हुन्छ उद्योगहरुको पनि
कच्चा पदार्थको माग पूरा गर्छ सधैंभरि
परामर्श सधैं गर्छन कृषि विज्ञहरु यहाँ
पुर्याउ कृषि ऊर्जा यो वास्तविक किसानमा

Award for Outstanding Social Service

NAPA life member Ms. Kemika Bhandari was awarded for her outstanding contribution on social service.

Ms. Bhandari was recognized at a function organized by the Non-Resident Nepali Association (NRNA) National Coordination Council (NCC), USA. The program was organized in USA on the occasion of 107th International Women's Day.

Congratulations Ms. Bhandari!



Deepest Condolence



NAPA family expresses its deepest condolence to Dr. Dilip Panthee and family on the demise of their beloved mother Dharma Kumari Panthee on February 14, 2017. She was 87. We wish Panthee family for necessary strength and fortitude to bear this irreparable loss of their matriarch.

NAPA Talk Sessions

NAPA Student Coordination Committee (SCC) organized a talk session entitled “**Application of Remote Sensing in Agriculture**” on January 28, 2017. Speaker Dr. Tilak Bahadur Shrestha, an expert on remote sensing, conveyed the applied scope of remote sensing in agriculture and allied areas.



Dr. Nishan Bhattarai, University of Michigan discussed his presentation as a discussant. The Student Coordination Committee was inspired from the active participation of Nepalese agricultural students and academia across the states. SCC is encouraged to bring similar kinds of programs in the future.

Another talk session on “**Novel Management Practice for Simultaneously Improving Soil and Environmental Quality and Sustaining Crop Yield**” was presented by Dr. Upendra M. Sainju on February 25, 2017. Dr. Sainju is with USDA-ARS, Sidney, Montana, USA. Discussion was facilitated by Dr. Rajan Ghimire, New Mexico State University.



Excerpts: Little is known about management practices that can simultaneously improve soil and environmental quality and sustain crop yields. The effects of novel and traditional management practices that included a combination of tillage, crop rotation, and N fertilization on soil carbon and nitrogen, global warming potential, greenhouse gas intensity, and malt barley yield and quality were examined under non-irrigated and irrigated cropping systems from 2008 to 2011 in eastern Montana and western North Dakota, USA. Results show that compared with the traditional management practice, soil organic C and total N at the 0-120 cm depth were 5% greater with the novel management practice under non-irrigated condition in eastern Montana and under irrigated condition in western North Dakota, but were not different under non-irrigated condition in western North Dakota. In both places under irrigated and non-irrigated conditions, total applied N rate, residual soil NO₃-N content at 0-120 cm, global warming potential, and greenhouse gas intensity were 15 to 70% lower with the novel than the traditional management practice. Malt barley yield and quality were not different between the two practices in both places. Novel management practices, such as no-till malt barley-pea with reduced N rate, can simultaneously enhance soil and environmental quality, reduce N input, and sustain crop yield compared with traditional practices in the northern Great Plains, USA.

Power Point presentations can be found at <http://www.napaamericas.org/talk-session.php>

Request from the General Secretary

NAPA is preparing a roster of experts (NAPA professionals) in different agricultural and allied disciplines. We sincerely request you to provide the following information at your earliest convenience.

Photo	Name: Terminal Degree with Discipline: Year Completed..... Terminal Degree from [Institution]: Current Affiliation: Areas of Specialization/Interest: Birth Place: ... [District]..... E-mail:
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For any questions regarding NAPA roster, please contact Dr. Bhandari at pbhandari15@gmail.com.

NAPA Annual General Meeting (on Conference Call)

NAPA’s Second Annual General Meeting is scheduled on **Saturday, June 3, 2017**. Please Mark your calendar. Dr. Upendra M. Sainju is Chair of AGM. As per the NAPA by-laws, this AGM will be organized via teleconference call. Details of the AGM will follow .



NAPA Membership

We would like to invite all agricultural professionals living and working in the Americas and around the globe to join NAPA and contribute to its goals and objectives.

Regular or General (\$50.00 for two years): Individuals who hold at least an undergraduate or bachelors or equivalent degree in agriculture or allied areas shall meet the requirements of this member category.

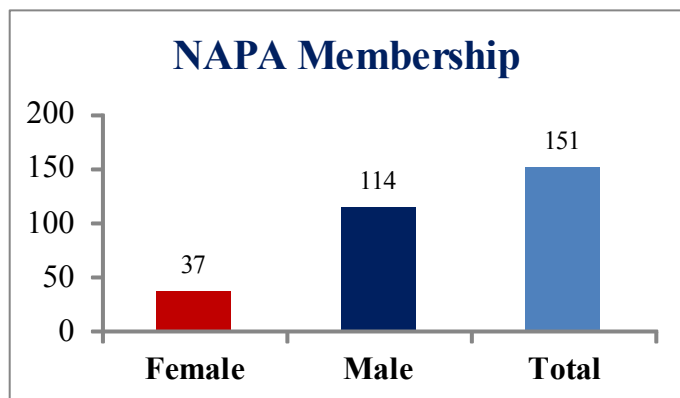
Student (\$25.00 for two years): Current students of agricultural and allied areas of studies who are at good standing student's status.

Life Membership (\$500.00 One time): Individuals having met regular/general member's category and pays defined dues at a time.

Joint/Family Membership (\$15.00 for two years): Spouse of a member of any of the five categories (regular/general, student, life, honorary, and associate), who is not eligible for other categories of membership. Family member shall not have a voting right.

Associate Membership (\$50.00 for two years (\$500 for Associate Life member): Interested individuals who do not qualify for membership types above. Associate member shall not have a voting right and shall not be eligible for Executive Committee positions. An Associate member may qualify for Associate Life member with the necessary payment. Associate Members from Nepal may pay one time fee of \$50 or equivalent.

Honorary (No fee, but free to contribute any): Individuals having outstanding achievement in academic and professional career and contribution to the field of agriculture and allied areas around the globe.



NAPA Membership by March, 2017

HOW TO JOIN NAPA?

Send your application to:

napa2072@gmail.com, or
ambikaadhikari100@gmail.com

Required fee may be paid through PayPal, credit card or by sending a check to NAPA treasurer at:

NAPA
C/o Ambika Tiwari
Treasurer
203 Calhoun Drive, Madison, MS 39110

Make sure to specify the purpose of payment (e.g., membership fee, donation, etc.) in the "additional information" box when paying online.

Membership Drive Committee (MDC)

Ambika Tiwari, Chair
Jhalendra Rijal, Member
Laxman Adhikari, Member
Lekhanath Poudel, Member
Pradeep Wagle, Member
Prakash Parajuli, Member
Raja Khanal, Member
Shiva Kumar Rai, Member
Upendra Sainju, Member

Student Coordination Committee (SCC)

Surendra Osti, Chair
Sushil Nyaupane, Co-Chair
Shrijana Duwadi, Member
Sujan Bhattarai, Member
Roshan Sharma, Member
Surendra KC, Member
Chandra Kanta Dhakal, Member
Shankar Gaire, Member
Pratistha Poudel, Member

By-laws Review Committee

Narayan Khadka, Chair
Raju Pandey, Member
Bishow Adhikari, Member
Kalpana Khanal, Member
Surendra Osti, Member
Toya Baral, Member

NAPA IT Committee

Santosh Aryal
Tanka Kafle
Sanjok Paudel
Shrijana Duwadi
Bijesh Mishra

New NAPA members (January-March 2017)

SN	Name	State/Country
Regular Members		
1	Ananta Acharya	Indiana
2	Gandhi R Bhattarai	Connecticut
3	K. P. Sharma	Canada
4	Omkar Joshi	Oklahoma
5	Raju Ghimire	Michigan
6	Ram N. Acharya	New Mexico
Student Members		
1	Bijesh Mishra	Kentucky
2	Chandra Kant Dhakal	Georgia
3	Dipak Kathayat	Ohio
4	Lucky Paudel	Georgia
5	Madhav Regmi	Kansas
6	Sangita Karki	Alabama
7	Srijana Thapa Magar	Kentucky
8	Usha Bhatta	Georgia
Joint Members		
1	Mandira Khanal	Wisconsin
Associate Members		
1	Agni P. Nepal	Nepal
2	Badri Aryal	Nepal
3	Dibakar Paudyal	Nepal
4	Dilli B. K.C.	Nepal
5	Durga Devkota	Nepal
6	Milan Adhikary	Nepal
7	Naba Raj Devkota	Nepal
8	Rudra B. Shrestha	Nepal
9	Vidur Ghimire	Nepal
10	Yam B. Thapa	Nepal
11	Yogendra K. Karki	Nepal

Language Editors

Bimal Acharya, Nepali (Nepal)
Yuba Raj Aryal, English (USA)

Call for NAPA Working Papers

This is an announcement for the publication of a series of working papers on agricultural and related disciplines. Dr. Dilip Panthee is entrusted with the publication of this series. All NAPA members are requested to submit their relevant working papers. You may submit it in a complete journal article format such that it helps publish in a peer reviewed journal later with minimal effort. Publishing as a working paper will not hinder you from future publication in any peer reviewed journal in any way whatsoever. It will in fact help you streamline your manuscript such that you will receive fewer reviewer comments for improvement. Please contact Dr. Panthee, editor-in-chief at drpanthee@yahoo.com for further details.



Book Project

NAPA is launching a book project entitled, **Sufficient, Safe and Healthy Food in Nepal: Principles and Practices (yet to be finalized)**. The book publication committee is formed as follows:

Dr. Drona P. Rasali, Chair
Dr. Megha N. Parajulee, Member
Dr. Ram Acharya, Member
Dr. Uma Karki, Member
Dr. Prem Bhandari, Member Secretary

Further information to follow.

Policy/Research Brief Committee

Dr. Bishwo Adhikari, Chair
Dr. Ramjee Ghimire, Member
Other member yet to be confirmed.



NAPA Contact Info

Email: napa2072@gmail.com

Facebook: Nepalese Agriculturists Americas

www.napaamericas.org/

