



ASTA - JA for PROSPERITY

# *Capacity-building and Sustainable Development*

## ANNUAL REPORT 2015-2016



Asta-Ja Research and Development Center Kathmandu, Nepal

January 4, 2017

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## Acronyms and Abbreviations

AIA	Acadiana Indian Association
Asta-Ja RDC	Asta-Ja Research and Development Center
Asta-Ja ICC	Asta-Ja International Coordination Council
CEO	Chief Executive Officer
GSA	Geological Society of America
IAAS	Institute of Agriculture and Animal Science
IRJR-N	Institute of Rubber and Jatropha-Nepal
MOAD	Ministry of Agricultural Development
NAIS	Nepal Agro-industrial Information System
NAPA	Association of Nepalese Agricultural Professionals of Americas
NCWA	Nepal Council of World Affairs
NGO	Non-Governmental Organization
SNEHA	Society of Nepalese in Hawaii
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
WFP	United Nations World Food Program

## BACKGROUND

Asta-Ja Research and Development Center (Asta-Ja RDC) is a registered non-profit and non-governmental organization with headquarters in Kathmandu, Nepal. We are dedicated to enhance grassroots community involvement in research and development of Asta-Ja (Eight-Ja) , Nepali letter 'Ja', meaning, *Jal* (water), *Jamin* (land), *Jungle* (forest), *Jadibuti* (medicinal & aromatic plants), *Janashakti* (manpower), *Janawar* (animals), *Jarajuri* (crop plants), and *Jalbayu* (climate) for poverty alleviation and socio-economic transformation of Nepal.

Asta-Ja RDC's goal is to develop partnership with research and developmental institutions, governmental agencies, community organizations, universities, non-governmental organizations, and other stakeholders and work collaboratively in agricultural, food and nutrition, natural resources, environmental and other research and developmental projects. We strive for community capacity-building, gender/ethnic equity, social justice, innovations and solutions to nation's agricultural, natural resources, and environmental problems and management challenges. We are well-connected to grassroots communities, governmental agencies, and policy making bodies.

The Asta-Ja RDC is dedicated to community capacity-building through training, technology transfer, logistic support, policy advocacy, and research and development. In order to bring knowledge, experiences and skills together for nation-building from both outside and within the country, the Asta-Ja RDC has created a wonderful interdisciplinary network of about 100 individuals of Nepal origin representing 17 countries (Please see Asta-Ja International Coordination Council (Asta-Ja ICC) Team at <http://www.astajardnepal.org/asta-ja-icc-.html>, who are highly enthusiastic and committed to the socio-economic development of Nepal. This is certainly the first network of its kind in the history of Nepal. This network includes highly accomplished scientists, academicians, businessmen, medical doctors, engineers, computer scientists, graduate students, administrators, IT professionals, service providers, researchers, and other professionals.

## MAJOR ACHIEVEMENTS

### Rebuilding Document and the Distribution of SuperGrain Bags, Seeds, Blankets, and *Jasta Pata* to Earthquake Victims

The Gurkha Earthquake 2015 devastated rural communities in Nepal are still struggling for their survival. Immediately after the earthquake devastation, the Asta-Ja ICC developed a working paper entitled “Rebuilding Nepal: Collection of Preliminary Thoughts”, which is available at <http://nebula.wsimg.com/d6b6e4de6f6ea685b86dbd784bf5b973?AccessKeyId=75D28E4B1D9BAA4EDA81&disposition=0&alloworigin=1>. This working paper is a collection of 13 preliminary thoughts by the Asta-Ja members from across the world providing initial thoughts on various aspects of post-earthquake reconstruction and management in Nepal. These thoughts are from experts in various disciplines: such as

engineering, medicine, agriculture, social sciences and planning. The idea is to put forward comprehensive list of items that the policy makers and implementers in Nepal need to think of during the long rehabilitation and reconstruction phase which may last more than a decade.

Asta-Ja RDC in collaboration with the Ministry of Agriculture and in coordination with District Agricultural Offices in the 23 earthquake devastated districts of Nepal distributed 40,000 GrainPro SuperGrain Bags, which were provided by GreaterGood.Org and the hungersite, to the earthquake victims in Nepal. Similarly, with financial support from the GreaterGood.Org and the hungersite. Asta-Ja RDC also distributed seed packets for earthquake victims in select areas of Kathmandu, Nuwakot, Kavre, and Sindhupalchowk districts. A total number of 611 families benefited from this seed relief effort. Seed packages included rice seeds (*sabitri*), and 10 different vegetable seeds



(tomato, carrot, radish, soybean, string beans, coriander, and green leafy vegetables). A total amount of 1,505 kg rice seeds and 227 packets (9 sets kit, 2 kg vegetable seeds per packet) of vegetable seeds were distributed. This was a very timely and crucial help for the victims.



Recently, the Asta-Ja RDC staff visited some of the villages nearby Kathmandu where bags and

seeds were distributed. Based on the quick visit of these families, on average 5.3 members per family, the rural communities have been enormously benefited from the bags and the seeds. Most families have used SuperGrain bags for the storage of their rice, corn, and wheat seeds from their earlier crops. Ms. Laxmi Giri, one of the earthquake victims in Ramkot, Kathmandu, has used SuperGrain bags for the storage of wheat seeds. She said that she had trouble saving her seeds previously due to insects and rodent damage, but, the SuperGrain Bag were very helpful to save her seeds this year. Another victim, Ms. Gyanu Giri, had stored corn seeds in the SuperGrain Bags and she noticed that the seeds were free from insect damage, therefore, she has used the same bags for storing wheat seeds after planting corn. She noticed insects dead inside the corn bags. Ms. Menuka



Giri, on the other hand, was so happy that she did not have to open the seed bags frequently, clean and dry seeds and store again to preserve for next season planting by using SuperGrain Bags. Menuka also told the staff that she was able to sell fresh vegetables from those seeds that she had received last year and was able

to support her schoolchildren for their educational supplies. Ms. Laxmi Bharati stores her wheat seeds in the SuperGrain bags and she really admires the bags for protecting seeds from rains as her 6-member family is still staying in a temporary shed following the earthquake devastation. Another victim, Ms. Geeta Bharati, has used her bags for seed storage as well, and she was happy to report that she was able to supply fresh vegetables for her 7-member family from the seeds that she had received last year. She was also able to sell some vegetables to meet her family expenses. All the victims that the Asta-Ja RDC staff met appreciated the hermetic/airtight bags and seeds very much and requested for additional bags so that they can store their grains and especially seeds for next year. Each of the families visited requested for at least 10-12 additional bags per family so that they could store and protect their grains and seeds especially when the monsoon was approaching and they were still living in their temporary sheds.

With financial support from the Society of Nepalese in Hawaii (SNEHA), the Asta-Ja RDC together with the Asta-Ja Abhiyan Nepal distributed Justa Pata as an emergency relief work in earthquake devastated Jaubari village of Dhading district in Nepal on June 16, 2015. Justa Patas were distributed with the help from community leaders including Mr. Hari Bhatta, Mr. Bishnu Gurung, Mr. Shibva Aryal, and Mr. D.P. Aryal. We transported the Tin Sheets all the way from Dhadingbesi to Jaubari village and distributed to the earthquake victim communities (141 households, each household one bundle) and to the local school named Shri Mandali Lower Secondary School.



With financial support from the Acadiana Indian Association (AIA), Lafayette, Louisiana, USA, the Asta-Ja RDC together with the Asta-Ja Abhiyan Nepal distributed relief blankets to earthquake victims in Kathmandu and Dhading districts of Nepal on November 27, 2015. With the onset of chilly winter, the victims really appreciated the relief package. Asta-Ja volunteers, villagers, and earthquake victims appreciated the support and thanked AIA for this valuable help. It was heart-breaking to see the devastation and poverty these villages. Despite almost eight months passed after the Gorkha Earthquake, this community sadly had not receive any relief from any other agencies due to its difficult terrain location and remoteness. About 120 households received relief blankets.



## Paper Presentation

Dr. Durga D. Poudel, the president of Asta-Ja RDC, presented a research paper entitled "Rebuilding Coupled with Sustainable Land Use, Food Security, and Agribusiness for Community Resiliency in Gurkha Earthquake Devastated Region in Nepal" to the 1st General Assembly of Association of Nepalese Agricultural Professionals of Americas (NAPA) in Irving (Dallas), Texas, USA in May 28, 2016. The list of attendees included senior IAAS faculty members such as Dr.



Dr. Kailash Nath Pakuryal, Dr. PP Sharma, and Dr. Gopi Upreti, and His Excellency Dr. Arjun Karki, Ambassador of Nepal to USA. In his talk, Dr. Poudel stressed on Land Use Planning and Resettlement, Food Security (Food Storage and Biotechnological Advancement), and Agribusiness as the three cornerstones for Nepal's national resiliency. He has given the same talk to audience of International Workshop on the 1st Memorial Day of Gorkha Earthquake, organized by the Department of Mines and Geology on April 24-25, 2016 at Yak and Yeti Hotel in Kathmandu; the Chamber of Development Committee, Hon. Mr. Rabindra Adhikari, Legislature-Parliamentarian, at Singhadurbar, Kathmandu on May 8, 2016; Nepal Reconstruction Authority in the presence of CEO Mr. Sushil Gyawali in Singhadurbar, Kathmandu, on May 10, 2016; and to the Nepal Council of World Affairs (NCWA) at NCWA building in Hariharbhawan, Lalitpur, Nepal, on May 11, 2016. For PowerPoint presentation of Dr. Poudel's talk, please click at

<http://nebula.wsimg.com/a911f79bcb20f330b69ed0e177999b54?AccessKeyId=75D28E4B1D9BAA4EDA81&disposition=0&alloworigin=1>

## Interaction Programme

Hon. Minister Shanta Manavi, Ministry of Livestock Development, Government of Nepal, attended the "Livestock and Poultry Production, Marketing and Advancement" Interaction program hosted by the Asta-Ja Research and Development Center (Asta-Ja RDC) in Hotel Kamal, Kathmandu on May 9, 2016. About 60 participants representing livestock producers, government officials, researchers, journalists, and other stakeholders attended the event. Meanwhile, the Asta-Ja RDC also initiated its Volunteers Program

presenting the first Asta-Ja RDC Volunteer T-Shirt to the Hon. Minister Manavi by Asta-Ja RDC President, Dr. Durga D. Poudel. Hon. Minister Manavi presented the Asta-Ja RDC Volunteer T-shirts to the volunteers. In her address to the audience, Hon. Minister Manavi appreciated the work of Asta-Ja RDC in agricultural and livestock development in Nepal. She stressed many challenges including improved breeds, diseases and parasite control, feed and nutrition, and markets in



relation to livestock industry in Nepal. Livestock producers shared their livestock production and marketing problems to the audience. To watch YouTube video for the directives from Hon. Minister Shanta Manavi, please click at <https://www.youtube.com/watch?v=OCAfpRb2enE>.



## Nepal Agro-industrial Information System (NAIS) Presented in GSA Conference

A poster on Nepal Agro-industrial Information System (NAIS) was presented in the Geological Society of America (GSA) 2015 Conference in Baltimore, Maryland, USA, was presented on November 2, 2015. The poster session was followed by a special session on Gorkha Earthquake in the morning where 14 papers were presented. The Asta-Ja Research and Development Center (Asta-Ja RDC), Kathmandu, Nepal, has taken the initiative for agro-industrial development of the nation through the development of NAIS.



The Asta-Ja RDC will be working closely with various funding agencies including the GreaterGood.Org and the hungersite, universities, NGOs, and several governmental agencies including the Ministry of Agriculture and Cooperative and the Ministry of Industry in Nepal. The NAIS project will begin with cataloging information related to earthquake-devastated cottage industries and agricultural production (e.g., soil types, geology, irrigation, cropping system, livestock, geohazards, climate, farming communities), developing mobile application so that current field information such as soil moisture, pest infestation, and crop yield can be directly fed into the system, and conducting spatial analyses using GIS to identify potential small to medium size agro-industries and businesses for rural Nepal that most efficiently use the resources immediately available.

## An Announcement of Nepal Agri-business Information System (NAIS)

The Asta-Ja RDC, the GreaterGood.Org and the hungersite have agreed to develop Nepal Agri-business Information System (NAIS) to rebuild Nepal from within. The objective of this project is to move beyond subsistence farming to a more robust rural economy through sustainable rural agro-industrial development and natural resource conservation. This project will primarily focus on the earthquake devastated region. The NAIS will help rural communities through cataloging information related to earthquake-devastated cottage industries and agricultural production (e.g., soil types, geology, irrigation, cropping system, livestock, geohazards, climate, farming communities), developing a mobile application so that current field information such as soil moisture, pest infestation, and crop yield can be directly fed into the system, mapping the new geography of the post-quake farming districts, and sharing these maps and data sets with farmers, researchers, government agencies, NGOs and private investors to create better matches for crop selection and production of goods



from locally-sourced materials. Spatial analyses using GIS will identify potential small to medium size agro-industries and businesses for rural Nepal that most efficiently use the resources immediately available. NAIS will help Nepalese to help themselves.

### Fundraiser Events

Green Fundraiser Event in Irving (Dallas), Texas, USA. The Asta-Ja RDC and the Institute of Rubber and Jatropha-Nepal (IRJR-N) hosted the Green Fundraiser Event in Ramailo Restaurant at Irving, Texas, USA. More than 50 participants attended the event. While the President of Asta-Ja RDC, Prof. Durga D Poudel, gave a PowerPoint presentation on Asta-Ja RDC's research and development initiatives and Asta-Ja movement in Nepal, Mr. Tilak Bhandari, Executive Director of IRJR-Nepal, gave a PowerPoint presentation on rubber production and development in Nepal. The event was full of fun with Nepalese cuisine and cultural show.

### Chinese Delegation Team Visits Asta-Ja RDC

A four-member Chinese delegation team led by Ms. Zhang Qiujin, Counsel, Beijing Municipal Research Center for Rural Economy, Beijing, China, visited the Asta-Ja Research and Development Center (Asta-Ja RDC), Kathmandu, Nepal, on December 21, 2016. Ms. Zhang Qiujin was accompanied by Mr. Du Lijun, Division Chief, Social Division of Beijing Municipal Research Center for Rural Economy;



Mr. Zhao Yuzhong, Chairman of the Board, Beijing Beicaiyuan Agricultural Science and Technology Development Co., Ltd; and Mr. Bai Yingbin, Vice General Manager, Beijing Agriculture Consultant and Smart Management Technology, Company, Beijing, China. Beijing Municipal Research Center for Rural Economy, a sub-institution of Beijing Municipality, is a professional authority responsible for rural affairs management, policy research for Beijing rural areas, agricultural economic development, and rural planning and reform in Beijing, China.

Asta-Ja Research and Development Center organized farm visits and hosted a dinner in honor of the delegation team. The delegation team visited Durga Chandra Agriculture Farm located in Sinamangal, Kathmandu, and owned by Ms. Chandra KC Bastola. Various crops cultivated in the farm include carrot, tomato, radish, cauliflower, cabbage, broccoli, spinach, eggplant, pumpkin, cucumber, beans, coriander, bitter gourd, and garlic. The farm also has 40 cows, 18 of them are milking ones.

The delegation team showed deep interest in learning about the modernization of Nepalese agriculture, commercial agricultural production, sustainable agriculture, import and export management of agricultural products, international trade, rural economic development, and the engagement of local government, development agencies, research centers, and other stakeholders in improving rural economy and farmer's income in Nepal.

As a token of goodwill, friendship and possible future partnerships, the delegation team leader, Ms. Zhang Qiujin, Counsel, Beijing Municipal Research Center for Rural Economy, handed a plaque to Asta-Ja Research and Development Center, which was received by Mr. Pushpa Lal Moktan, Acting President, Asta-Ja Research and Development Center, Kathmandu, Nepal. In the meantime, she thanked the Asta-Ja RDC team for organizing this visit and extended an invitation to visit China. She hoped for more bilateral visits and exchanges for accelerated development of agricultural and rural economy in Nepal.



Asta-Ja RDC officials and members joining the delegation team included Mr. Pushpa Lal Moktan, Acting President, Dr. Bishnu P Chapagain, General Secretary, Dr. Jwala Bajracharya, Secretary, Dr. Jagat Devi Ranjit, Member, and Mr. Hari Bhusal, Office Coordinator.

### Dry Chain

In the process of helping food sector of Nepal in the aftermath of earthquake, Dr. Peetambar Dahal joined Asta-Ja RDC along with Dry Chain concept. Utilizing the connection of Asta-Ja ICC advisory member Prof. Gokarna GC in Nepal, Dr. Dahal and Prof. Poudel submitted a Climate Smart Dry Chain proposal and formally presented to the CEO Sushil Gyawali and his team in Nepal Reconstruction Authority, Government of Nepal. The CEO opined that he would consult the Ministry of Agricultural Development (MOAD) on our proposal and look for funding. During this visit, the team also reached out to the United Nations World Food Program (WFP) and UNICEF in Kathmandu. Currently, Dry Chain proposal for the earthquake victims is under consideration at UNICEF, Kathmandu. Further expansion of the Dry Chain concept was presented to the 25th annual conference of American Institute for Cancer Research (<http://www.astajardcnepal.org/nepal-aflatoxins-and-dry-chain-project.html>) and efforts are underway to connect to Bill and Melinda Gates Foundation, International Agency for Cancer Research and Nutrition Innovation Lab/USAID.

## Executive Board

The Asta-Ja RDC includes an 11-member Executive Board with President, Senior Vice-President, Vice-President, General Secretary, Secretary, Treasurer, and five Members. Its esteemed Executive Board includes highly recognized and experienced professionals with the highest level of ethics, morale, and commitment for community services, research and development, and nation-building. These Board Members have earned their highest degrees from a wide range of countries including the USA, India, Thailand, UK, Germany and Israel. Professionally, the Asta-Ja RDC Executive Board Members include academicians, researchers, agricultural extension specialists, community workers, scientists, and others. They have collected a wealth of working experience from many governmental and non-governmental organizations, international agencies, private companies, and both inside and outside Nepal.



President  
Dr. Durga D. Poudel  
Soil and Environmental Scientist  
Founder of the Asta-Ja Framework  
Founding Member Asta-Ja Abhiyan Nepal  
International Coordinator Asta-Ja ICC



Senior Vice-President and  
Acting President  
Mr. Pushpa Lal Moktan  
Rural Development Expert



Vice-President  
Dr. Chandra Kant Gyawali  
Constitution Specialist, Lawyer,  
and Sociologist



General Secretary  
Dr. Bishnu P. Chapagain  
Phytochemistry and  
Agricultural Scientist



Secretary  
Dr. Jwala Bajracharya  
Agricultural Plant Scientist,  
Value Chain and Women Empowerment



Treasurer  
Dr. Udhav Raj Khadka  
Environmental Scientist



Member  
Mr. Madhav Adhikari  
GIS Specialist



Member  
Mr. Amleshwar Singh  
Forestry and  
Agroforestry Specialist



Member  
Dr. Kamal Kant Acharya  
Geologist



Member  
Ms. Chandrika Rana  
Magar  
Social Worker/  
Communication



Member  
Dr. Jagat Devi Ranjit  
Agronomist