

Summary of GNE Trip to Nepal and Indonesia, 2020
By Neil F., with contributions from
Catherine T., Leslie M., and Marie L.

Objectives of this year's GNE trips to Nepal and Indonesia were two-fold:

1. to re-visit Annapurna Gaupalika Municipality in the Myagdi District of Nepal and assess the need for educational support for rural villages
2. to return to Banggai Regency on the Island of Sulawesi, Indonesia to follow-up on the initiation of a study on the impact of nutrition and sanitation education on rural populations' knowledge base and on biological outcomes.

NEPAL The impetus for the Nepal project was that Dr. Marie Long (Founder of GNE) had worked on delivery of educational materials to rural Nepali villages for several years and, in the past year, had been invited by the elected leader of Annapurna Gaupalika, Myagdi Region (Captain Dam Bahadur Pun) to conduct a full survey of nutrition knowledge and food security within his region. That survey could then serve as a progenitor for development of a targeted educational program consisting of best practices relating to nutrition, health and agricultural/veterinary practices for the region.

Impetus for the Indonesia project was provided by the recent addition of a statistical support person (Joyce C., Department of Psychiatry, UCSF) to the project. She had completed some initial analyses of Year 0 (i.e., 2019) data that had been collected by the GNE team. Her preliminary analysis supported the understanding that "education" is positively correlated with many of the behavioral elements often associated with successful, developed communities. Having a competent statistician on-board had truly been the "missing-link" in our optimistic search for impact of what we do internationally.

The assembled team consisted of Dr. Marie L., Dr. Catherine T. (a retired physician), Dr. Elizabeth G. (a veterinarian from Albuquerque, NM), Leslie M., a Kathmandu-based agricultural specialist, Neil F., a former Oregon State University Professor, Narayan Bhandari, a Pokhara-based trekking specialist and philanthropist, Captain Dam and his son ("Sunny" Indra Pun) and a spectrum of porters and translators.

The team assembled in Kathmandu, transferred to Pokhara, and then met with Captain Dam for planning. There, we were introduced to his son, Sunny Pun, a resident of Gorapani. Several preparatory hikes were undertaken to strengthen the team's endurance after which we departed *en masse* from Dana and hiked through villages that lay well up into the Himalayan foothills toward the North-east of Dana. These included Lower Narchang, Upper Narchang, Poudwar, Shika, Histan and Kaphaldanda. Each day's efforts consisted of a several hour-long hike moving at near 1.5 mph with altitude gains and/or losses in the low 1000-2000s of feet. The hiking wasn't treacherous but it was more than arduous for three of the sixty-somethings who were part of the effort, and the thirty-somethings weren't exactly leaping down the trail either. While the team never encountered any technical climbing, the allure of that possibility

continually intrigued us: with the nearby *circa* 25,000-foot snow-covered Annapurna, Nilgiri and Dhaulughiri peaks adjacent to us.

In each of the villages we visited, we were accommodated in village rest houses that ranged from basic to one on the Annapurna trail that, in fact, included an attached bathroom in each room. All other accommodations, however, tended toward the more “basic”. In each of the villages, Captain Dam had arranged for 20-30 villagers to meet with and to interact with the GNE team via our use of interpreters. These included Sunny and an energetic agricultural student (Bhanu). Surveys required about one-two hours and included topics of food production systems, crops grown, typical meals available, seasonal changes in food availability, basic knowledge of nutrition, medical and veterinary support, and common human and animal diseases. In Upper Narchang, we were entertained by traditional songs and dance and, in the end, even partook in the traditional village dances. In each village, the GNE team members were presented with a “mallah”: a lei-like garland assembled from red rhododendron flowers.

Space is too short in this report to record the full spectrum of information collected by the GNE; however, it became clear that further educational support of the villages would be welcome. Topics of specific interest to the villages included cropping systems, potential new cash crop opportunities (e.g., Kiwi fruit and seed potato), animal diseases and access to nutritional and medical information. It was evident that each village had been in contact with other NGOs; however, it appeared that none of the previous contacts with NGOs had been sustained. Also of interest, villages that were part of the Annapurna Trail and which therefore received income from trekkers were often far better off economically than their more distant neighbors. This benefit included access to reliable medical and veterinary support. This underscored the importance of establishing mechanisms to enhance reliable economies in these communities, and use of internet searches for self-improvement in plant-based agriculture was noticeably higher in the villages with more economic stimulus

The agriculture team, consisting of Leslie, Dr. Liz, and translator Bhanubhakta (who will soon graduate from his Bachelors in Agriculture in Nepal) was also able to run mini-clinics for crop pest and livestock issues in the area. In addition to collecting data, a variety of questions were answered and troubleshooting done for the most pressing issues in the villages. The team is fully convinced that an agricultural program consisting of team visits to the villages for longer, multi-day, multi-topic agriculture clinics will be well received. Some of the topics that arose and for which advice was given were grain smut, potato field and storage issues (suspected pectobacterium infestations), bovine uterine prolapse, sour-crop in chickens, fly problem in orange orchards, and efficient disposal/reuse/nutrient cycling of diseased animals and vegetative agricultural waste.

Nutrition Team Please see the report from Dr. Catherine T.

The Tablet and Technology Team, consisted of “Dr. Mary” (Dr. Marie translates to “Dr. Death” in Nepali I have learned). The 5 tablets had been preloaded with the 3 Nutrition apps and the first

section of the Diabetes app. To my ongoing surprise (I am a slow learner apparently), everyone liked the apps, to the point that most people watched all 4 and some watched them twice through. Considering they were in English, the degree of attention and the number of correct answers suggests the listeners “got it”. Miao Z., the GNE technical wizard had loaded the tablets with interactive questions that allow data collection. Miao will analyze the tablet results in the future.

After six days of hiking, being storm-stayed in one village by a small blizzard, meeting with villagers in seven villages and a full mile vertical downward trek into Galeshar on our last day, all were ready for a cold beer and a warm shower. The group reconnoitered in Pohkara with Captain Dam where a decision was made for GNE to submit a proposal to him for funding. Details will be forthcoming in subsequent GNE reports.

INDONESIA The plan had then included a trip by the team to Makassar and Luwuk Indonesia where we were to complete the follow-up survey of twenty Banggai Regency villages; a controlled study of the impact of GNE’s educational programs. However, mid-way through the Nepalese effort, word was received that the COVID-19 threat necessitated a delay. We do intend to return to Indonesia when it is safe and when the Indonesian government has made the assessment that outside groups are again able to safely visit.





