Generating Sustainable Human and Institutional Capacity in Nepal

Looking Beyond a Decade of Accomplishments in Nutrition
NIL Legacy Event | September 17th, 2021
Intended and Unintended Successes of the Nutrition Innovation Lab’s Research Capacity Building Initiatives in Nepal
WHERE IT ALL BEGAN

DEFINE CONTEXT
This would involve taking stock of existing information and experiences, noting ongoing research and intervention activities addressing domains of interest specified under the CRSP-Nepal, across areas of agriculture, household income/expenditures, food consumption patterns, etc., and identify essential gaps in knowledge required to advance knowledge acquisition, policies and programs. This may require undertaking a literature review, conducting key informant interviews, and convening workshops or meetings with key stakeholder researchers and institutions.

ESTABLISH DIALOGUE WITH STAKEHOLDERS
There would need to be agreement among key, participating stakeholders, including relevant GON ministries, USAID/Nepal, the Global CRSP-Asia team, to prioritize major research gaps needed to be filled or other key purpose(s) for which baseline data is to be collected. This process should lead to specification of aims and the rationale for conducting additional research.

SPECIFY STUDY OBJECTIVES
This is a key step and stakeholder buy-in and agreement are vital to this process because the study or survey objectives will, to a large extent, dictate sampling methodology, sample size, type of data to be collected, type of data collection instruments to be used, and respondent groups.
WHERE WE LANDED – INTENDED SUCCESSES

Nutrition research capacity
Johns Hopkins Bloomberg School of Public Health
Graduate Summer Institute of Epidemiology & Biostatistics training program

- Short, intensive courses in epidemiology and biostatistics
- Developed an understanding of the principles, methodologic strategies and practical aspects of epidemiological research

Early career researcher engagement
- Student workshops at the symposium
- NIL faculty guest lectures on nutrition research methodology to students & early career researchers from the MPH program at Institute of Medicine & Nepal Agricultural Research Council

Scientific symposia
- Annual convening of multiple stakeholders to take stock of ongoing research on ag-nut pathway agriculture -> food security -> nutrition
- Facilitated discussions on prioritization of research needs
NUTRITION RESEARCH CAPACITY

Sujay Bhattacharya  
*Then*: Nutrition Specialist @ Child Health Division, Department of Health Services  
*Now*: Head of Nutrition and Health Department @ Action Against Hunger, Nepal

Amod Poudyal  
*Then*: Junior Faculty (2012) at the Institute of Medicine  
*Now*: Head of the Central Dept of Public Health at IOM

Raman Shrestha  
*Then*: MPH student  
*Now*: Global Evidence & Insights Advisor at Marie Stopes International

Rajan Paudel  
*Then*: Junior Faculty @ IOM  
*Now*: Associate Professor of Public Health

KP Lamsal.  
*Then*: New graduate - MSc Nutrition & Dietetics student  
*Now*: Nutrition Specialist, Suahaara II
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

AGRICULTURE TO NUTRITION PATHWAYS: SCIENTIFIC SYMPOSIA

2012 - 2019
KNOWLEDGE SHARING & TRAINING

• Writing a winning research paper/publication
• Crafting and refining a measurable research question
• Conducting food security assessments
• Anthropometric assessment & standardization
• Using STATA to analyze dietary and nutritional status nutrition data
• What is ODK? ODK and its utility in conducting research
• Setting up a dietetics accreditation program
• Nutrition surveillance in urban and semi-urban areas
• Identification of neglected, indigenous and underutilized crops and their role in improving diets
• Novel methods to measure physical activity
• Use of fertilizers and pesticides: Protecting or engendering food production
• Assessing aflatoxins ensure safe food environments
• Equity analysis in nutrition and health - equity and access in nutrition intervention

More information on symposia content visit: https://www.nutritioninnovationlab.org/node/533
INCREASING INTEREST & PARTICIPATION

Registered Attendees

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ANH Academy
Agriculture, Nutrition & Health Academy

unicef
EUROPEAN UNION
“I have been attending the symposium since 2013, when I was pursuing a Master’s Degree in Food Technology. The two-day symposium was very fruitful and continuously notified me about future NIL events. The best aspect of NIL symposium are the panel discussions among different stakeholders. NIL symposia also focus on student related sessions which I find very useful for them to get exposure with academics from other universities.”

- Abhishek Khadka, Young Professionals for Agricultural Development

"It provides an opportunity to understand the dynamics of agriculture-nutrition pathways in addressing malnutrition. You can relate and translate the evidence and insights shared during the symposia into action, both at your personal and professional front."

- Sabnam Shibakoti, Ministry of Agriculture and Livestock Development Government of Nepal

“Nutrition Innovation Lab’s Scientific Symposium is an international rostrum that feeds into the growing research demand within Nepal and helps set development goals on agriculture-nutrition-health. I encourage participants to not miss the opportunity to learn about research advances and its linkages to development.”

- Dikshit Poudel, Agriculture Forest University
UNINTENDED SUCCESSES OF PLANNED ACTIVITIES

Population-based research methods
- PoSHAN Community Studies: annual & seasonal sites
- Conventional anthropometric standardization methods

- Student Research Exchange
- Mentor- peer relationships:
  - peer-review papers
  - statistical analysis of data: PoSHAN-Nepal data team & MPH students
Factors associated with dietary diversity among pregnant women in the western hill region of Nepal: a community based cross-sectional study

Vintuna Shrestha, Rajan Paudel, Dev Ram Sunuwar, Andrew L. Thorne Lyman, Swetha Manohar, Archana Amatya

Why are farmers keeping cultivable lands fallow even though there is food scarcity in Nepal?

Uttam Khanal

Food Security 10, 603–614(2018) | Cite this article
CHALLENGES AND OPPORTUNITIES

• Sustaining momentum & interest

• What are incentives for collaboration?

• Institutional vs human capacity building and investments
  ❖ Enabling environments in the face of inconsistent governance
  ❖ Institutional memory
  ❖ Assessing demand

• Addressing equity and inclusion

• The role of professional associations

• Peer to peer mentoring
ACKNOWLEDGEMENTS

- USAID: Ahmed Kablan, Maura Mach, Shanda Holmes, Hari Koirala, Debendra Adhikari
- NTAG: Deepak Thapa, Preeti Subba, Priya Shrestha, Prativa KC
- IOM: Dr. Sharad Onta, Dr Narayan Wagle, Dr. Amod Poudyal, Dr. Madhu Dixit-Devkota, Dr. Archana Amatya, Dr. Binjwala Shrestha, Dr. Rajan Paudel, Dr. Ramesh Kant Adhikari
- NARC: Dr. Devendra Gauchan, Dr. Y.N. Ghimire
- NIL Team, Nepal: Abhigyna Bhattarai, Angela KC, Chandni Karmacharya, Arvin Saleh, Binod Shrestha, Dev Raj Kumar, Ashish Lamichanne, Ashish Pokharel
- NIL Team, US: Dr. Keith West, Dr. Rolf Klemm, Dr. Andrew Thorne-Lyman, Dr. Patrick Webb, Dr. Shibani Ghosh, Dr. Robin Shrestha
- National Planning Commission, GoN (past & present): Dr Usha Jha, Mr. Atmaram Panday, Dr. Geeta Bhakta Joshi, Dr. Mishra
- Child Health Division: Rajkumar Pokharel
- ANH Academy: Joe Yates, Suneetha Kadiyala, Jeff Waage
- UNICEF: Stanley Chitekwe, Sanjay Rijal, Pradiumna
- Our student volunteers
Institutional Capacity Building in Nutrition Education and Research: Perspectives from PAHS and Nepal

Dr. Kedar Baral, Patan Academy of Health Sciences
BACKGROUND

- NIL is a complex and multi-sectorial project
- It is difficult to succinctly summarize
- Fundamental question is how we understand and interpret capacity building
- My concern is whether or not the agenda of interest percolate into the big system both within MOHP and academia
- The measurement of capacity is a challenging task since it is a multidimensional & dynamic process
- I will be summarizing NIL through a series of illustrations
NIL is one the contributors under the leadership of ministry of health and population and academia.

1. BBNC participants are now catalysts in academia and practice wherever they are.
2. They are improving and strengthening nutrition science teaching
3. Greater number of students are choosing nutrition topics for their master’s thesis
4. People from diverse disciplines are increasingly attracted towards research methodology training/workshop
5. Their engagement and networking motivates me to do more
6. Informal but functional networks of BBNC, training-workshop and symposium participants exist
1. Poshan study is unique in terms of methods and results. We learned a lot while designing and implementing this study.

2. Aflacohort is a very complex and ambitious community level study. The tools were questionnaires, measurement and samples collected at multiple time points. Samples transport and storage, including maintaining records, involved several personnel in different sites.
   1. Recruitment and mobilizing team, training and supervision, and implementation of activities
   2. Clinical sample collection, transport, appropriate storage, shipment and long term storage required multi-level meticulous work of developing and running a system mobilizing coordinated multi-skills personnel
   3. Data management
   4. Dealing and communicating ethics committees
   5. We successfully completed field work
WHAT IS HAPPENING IN NEPAL NOW?

1. Increased numbers of nutrition advocates in health and agriculture sectors
2. New program started and strengthened existing training programs
3. Leadership at MOHP and different institutions are more informed and engaged in nutrition program and activities
4. Continuous feedback being provided by nutrition advocates to the leadership
5. Mid-level trained personnel experienced in complex research are in market
6. PAHS, as a partner in all projects, has strengthened its nutrition training and research cycle management

Without a doubt, NIL is one of the major contributors to the growing movement in Nepal pushing for an improvement in nutrition status.
Beyond Workshops and Symposia: Impact of N-IL in Strengthening a Strong Foundation of Young Nepali Nutrition Professionals

Ram Shrestha, D.Sc. MS, MSc
APPLICATION OF CAPABILITY DEVELOPED

- More than 30 CAFODAT students participated in the NIL seminar and workshops organized in Kathmandu.
- Participants has improved their capability in conducting seminar, workshops, and quality research.
- After receiving the Bachelor as well as Master’s degree, CAFODAT students work in the following organizations
  A. Food and Dairy industry
  B. Hospitals and clinics
  C. Govt Health and Agriculture departments and labs
  D. Public, Private, NGOs research organizations
  E. Nutrition and Dietetics institutions
APPLICATION OF RESEARCH CAPABILITY DEVELOPED

CAFODAT College Master’s in Nutrition and Dietetics Students applied their research, seminar, and workshop organization skills in the following areas:

1. Write a quality research proposal for Master’s Thesis
2. Guide CAFODAT students to write and conduct Master’s as well as Bachelor’s Thesis research
3. Build skills in writing and publishing research articles in Nepali as well as international journals
4. Write research grant proposal for UCG as well as to other funding agencies
5. Write and secure a grant to research in the DFTQC lab
6. Encourage technical people of their department to write nutrition-sensitive proposals and conduct research
7. Lobby higher authority to allocate funds for nutrition-sensitive research
8. Organize quality nutrition and dietetics workshops and seminars (NDA and CAFODAT College)
9. Write a concept paper to conduct a workshop for developing protocol and guidelines for certification of a registered dietitian.
10. Established a research department in CAFODAT College
Tufts Professors Visit CAFODAT College

Tufts Professors Presentation
Student explaining importance of “Nutritious Nepali Thaal Meal” to Mr. Kedar Parajuli; Chief, Nutrition Section

CAFODAT and Central Home Science Department staff and students participating pre-workshop skype call with Tufts University, USA staff
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www.feedthefuture.gov