



# Environment and Natural Resources Trust Fund

## 2021 Request for Proposal

### General Information

**Proposal ID:** 2021-255

**Proposal Title:** Cross Cultural Environmental Education

### Project Manager Information

**Name:** Narayan Dhakal

**Organization:** Diversity Intelligence in Climate Action

**Office Telephone:** (651) 500-1096

**Email:** dhakal.contact@gmail.com

### Project Basic Information

**Project Summary:** Investigate intercultural knowledge on environmental conservation, household energy, sustainable agriculture, and food processing from the minority community. Bring this knowledge to develop a hands on environmental education for MN public.

**Funds Requested:** \$420,000

**Proposed Project Completion:** 2023-06-30

**LCCMR Funding Category:** Environmental Education (C)

### Project Location

**What is the best scale for describing where your work will take place?**

Statewide

**What is the best scale to describe the area impacted by your work?**

Region(s): Metro

**When will the work impact occur?**

During the Project and In the Future

## Narrative

### **Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Diversity population in the USA is growing, and so is the knowledge base. Minority immigrants and refugee from Asian countries such as Nepal, Bhutan, Myanmar, and India carry immense knowledge dealing with the Environment. Back to their home country majority time they were engaged in activities mainly on saving energy, traditional farming, food processing and collecting natural resources from the forest. However, such knowledge becomes dormant as these community engage in the modern Western lifestyle and ultimately vanish as there is no policy level constructive mechanism to tap such knowledge. While interacting with one Bhutanese women, she said she remember several home medicines that she was using to treat minor disease like common cold, slight fever, and indigestions. However, she said that knowledge will be wasted if she cannot share such knowledge for the public health benefit. Another example is Bhutanese, Hmong, Kareen communities are producing organic vegetables and selling in the Farmers Market. This is an excellent policy in promoting better health, environment and social justice among every group of citizens. The diverse minority group can bring an immense resource in reducing carbon emissions in the atmosphere if such knowledge is heard, documented and brought into the Environmental Education.

### **What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.**

One of the solutions to the environmental problem is to understand each other by developing collaboration among the community groups. The minority community has immense knowledge of valuing and saving the environment. They know environmentally sound practice of growing food, rearing chickens, goats, sheep and cows, preparing organic manure and using it for permaculture. Compared to the highly polluting corporate business, these minority community can run a small business that help save energy and the environment. The proposed solution this proposal intent to bring is to document the minority knowledge on energy, agriculture, food processing, public health and family wellbeing. After qualitative survey the knowledge is documented, and a hands-on environmental education package will be developed. During the process, every stakeholder will be consulted to know their views on the appropriation of such knowledge in developing education toward saving the environment and dealing with the public health. The goal is to develop a synergistic intercultural cooperative to achieve the 100% clean energy future combined with public health contribution to Minnesota. This author has worked with the grassroot community in Nepal for more than 20 years and can understand community capacity to solve the environmental problems.

### **What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

I was assisting a teaching on sustainable practices and I shared some tips to students how to understand nature. A student practiced that and shared her experience how enjoyable she felt while hiking in the city and county park after she attentively observed birds and butterflies flying, flower blooming, smell of plants and soil during hiking. Before, this was just walking while feeling stress and anxiety. Following are specific outcomes:

1. Increased understanding of nature
2. Valuing nature for feeling good
3. Enable making future decisions environmentally friendly
4. Increased co-existence between community groups

## Activities and Milestones

### Activity 1: Research on cross cultural environmental knowledge

**Activity Budget:** \$140,000

**Activity Description:**

The cross-cultural environmental education is necessary today to bring a climate justice. The earth atmospheric temperature is increasing. Temperature induced natural calamity such as flood, extreme weather patterns, excess rain, forest fire are becoming factors of social, economic and environmental degradation. The economically poor community are suffering more with the climate change because they must work and get paid to sustain their living, educate their children, and maintain health. Most of these community engage in the low paying jobs either in the agriculture or in the manual labor job. Being a scientist in my experience, as of now the science based environmental education has been a superficial one-way development without reaching out to the roots of the problem. The need and importance of the traditional or cultural or indigenous knowledge has already been recognized by the Intergovernmental Panel on Climate Change (IPCC).

Diversity population has diverse cultural knowledge to deal with the environment. The indigenous knowledge of living in association of air, water, soil, fire and the space has been so necessary to educate each other for the present and future generation. This activity will focus on delivering cross cultural environmental education. Cross cultural audience will be encouraged to participate.

**Activity Milestones:**

| Description             | Completion Date |
|-------------------------|-----------------|
| Research Design         | 2021-09-30      |
| Research Administration | 2022-03-31      |
| Report Publication      | 2022-06-30      |

### Activity 2: Map cross cultural knowlege for education

**Activity Budget:** \$140,000

**Activity Description:**

The systematic mapping of the abundance of cultural knowledge of environmental value will be completed. The diversity knowledge of climate change across the community will be prepared. Stakeholders consultation meetings will be conducted to brainstorm to see appropriations of the cultural knowledge for the environmental education. This author recalls his childhood memories to engage in farm producing food and processing and consuming. The whole knowledge was formed in such a way food production was based on permaculture and organic methods. The food processing was also an environmental activity as there was not any chemical contamination whatsoever. The environmental dimension of growing, processing and consuming was toward saving and respecting nature and natural resources. In fact, the food is the medium that connect us with nature through earth. This activity will give a guideline to design the future environmental education. Such educational package will generate awareness connecting human with nature through growing food. Many immigrants from Asia and Africa can contribute to map such education package in coordination with the general public in Minnesota.

**Activity Milestones:**

| Description                      | Completion Date |
|----------------------------------|-----------------|
| Stakeholder Consultation         | 2022-09-30      |
| Educational Packages Development | 2022-10-31      |

### Activity 3: Pilot Culture Based Environmental Education

**Activity Budget:** \$140,000

**Activity Description:**

Based on the research outcome and mapping followed by a stakeholder's knowledge validation meeting, a pilot environmental education package will be developed. Depending on the stakeholders' consent and requirements, two types of education packages will be developed:

- a) The school-based (Middle – High) curriculum will be introduced.
- b) The adult education package will be developed and delivered.

The school based course curriculum will be delivered with the help of school education administration. The adult education will be delivered through audio and video podcasts. Such education will be to facilitate the intercultural information across the community groups. Here the diversity population will bring their environmentally friendly stories. Such stories will be shared in cross-cultural meetings. Such meetings will be held in the DNR managed state or regional parks.

**Activity Milestones:**

| Description                      | Completion Date |
|----------------------------------|-----------------|
| Education delivery and feed back | 2023-03-31      |
| Project Evaluation               | 2023-05-31      |
| Final Project Report Submission  | 2023-06-30      |

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?**

The cross-cultural information those collected from the minority community will be documented. Based on the knowledge appropriation, public interest and aspirations this project will develop a environmental education. The education will be validated through the stakeholder consultation and pilot tested and recommended for future environmental education policy. Based on the appropriation of the environmental education future project delivery will be done through the public-school curriculum. Encouraged to open private school dedicated to implement environmental education. Seek funding from federal or state government. In the long run, seek funding from the energy sector that generate revenue from the carbon sequestrations.

## Project Manager and Organization Qualifications

**Project Manager Name:** Narayan Dhakal

**Job Title:** CEO

**Provide description of the project manager's qualifications to manage the proposed project.**

Narayan P. Dhakal, CEO of the Diversity of Intelligence in Climate Action (DICA) has been working in Minnesota with the grassroots Bhutanese and Nepalese Communities. Narayan's research was in the social, economic and environmental wellbeing of the voluntary resettlement program. A certified Climate Reality Leader trained in August 2019 in Minneapolis, MN. Born and raised in Nepal Narayan arrived in Minnesota in 2003 due to the uprising Maoist atrocities in Nepal. He and his family living were risky and challenging in Nepal as Narayan was working with a highly reputed environmental NGO Managed by the Royalties. With the help of a University, Minnesota professor he came to the USA in the pursuit of a Ph.D. study in Conservation Biology. Since his arrival, Narayan has been instrumental in helping several non-profit organizations here in the Twin Cities Metro area in a capacity of a board of directors. With a goal to bring win-win-win innovative ideas that bring sustainable living amid climate change. Narayan's philosophy is guided by a combination of his study in conservation science and the faith and culture that he brought up with. Narayan is a Hindu by religion and his culture and upbringing had been within the philosophy of "let all be happy in the world". Keeping this in mind he is constantly working and building a network with the likeminded individuals in Minnesota. Trying to be a catalyst for change to make this earth a healthy and environmentally sustainable planet.

Narayan is currently involved with Minnesota Interfaith Power and Light (MNIPL) in the capacity of the Board of Directors. Recently involved with MN350 and advocating the importance of healthy and environmentally friendly food amid COVID-19. Working with Bhutanese Refugee in Minnesota in research project funded by MN Department of Agriculture. Advocating safe public health

**Organization:** Diversity Intelligence in Climate Action

**Organization Description:**

The Diversity Intelligence in Climate Action (DICA) is a registered LLC in the State of Minnesota. The LLC is officially fulfilled requirements in obtaining Tax ID, and DUNNS and NAISC numbers and registered in SAM. DICA's vision is to create a better world for living by saving the global environment. The mission is to engage society and the community across diverse knowledge for productive climate action. The company also has a scope of using Information Technology (IT) to develop an online application on environmental education. Network with University of Minnesota, faith organizations and minority community-led Non-profit organizations, DICA possesses a high standard LLC in working in Natural Resource Management in Minnesota. Diversity knowledge in climate action in Minnesota is a present-day need to complement to the ongoing scientific research. This business plan focuses on research consulting on the integrated

climate action for environment, health, and wellbeing. The business model is the action research, educational development and community outreach for the climate justices. The focus is to play the role of a catalyst where the indigenous knowledge from the minority community is shared for the general USA public to help solve the climate problems.

## Budget Summary

| Category / Name                       | Subcategory or Type                        | Description  | Purpose | Gen. Ineligible | % Benefits | # FTE   | Classified Staff? | \$ Amount        |
|---------------------------------------|--|--|---------|-----------------|------------|---------|-------------------|------------------|
| <b>Personnel</b>                      |  |  |         |                 |            |         |                   |                  |
| Narayan Dhakal                        |  | Project Manager  |         |                 | 10%        | 200,000 |                   | \$200,000        |
|                                       |  |  |         |                 |            |         | <b>Sub Total</b>  | <b>\$200,000</b> |
| <b>Contracts and Services</b>         |  |  |         |                 |            |         |                   |                  |
| Research Consultant                   | Professional or Technical Service Contract | Research consultant specialized social environmental research. Must have a strong background on the methods of conducting qualitative research on the international minority respondents. Must be able to speak and communicate in Nepali language.  |         |                 |            | 50,000  |                   | \$50,000         |
| Information Technology Consultant     | Professional or Technical Service Contract | Expert on online educational content development. Online educator on Environmental Education. Culturally aware on the connection between environmenta the day to day living. Masters in social science or international environmental science or global studies or environmental or cultural anthropologist. |         |                 |            | 50,000  |                   | \$50,000         |
| Office Assistant                      | Professional or Technical Service Contract | Office Assistant having skills and experience in managing day to day office administration and account.  |         |                 |            | 60,000  |                   | \$60,000         |
|                                       |  |  |         |                 |            |         | <b>Sub Total</b>  | <b>\$160,000</b> |
| <b>Equipment, Tools, and Supplies</b> |  |  |         |                 |            |         |                   |                  |
|                                       |  |  |         |                 |            |         | <b>Sub Total</b>  | <b>-</b>         |
| <b>Capital Expenditures</b>           |  |  |         |                 |            |         |                   |                  |
|                                       |  |  |         |                 |            |         | <b>Sub Total</b>  | <b>-</b>         |

|                                     |   |  |                                    |  |  |  |                    |                  |
|-------------------------------------|---|--|------------------------------------|--|--|--|--------------------|------------------|
| <b>Acquisitions and Stewardship</b> |   |  |                                    |  |  |  |                    |                  |
|                                     |   |  |                                    |  |  |  | <b>Sub Total</b>   | -                |
| <b>Travel In Minnesota</b>          |   |  |                                    |  |  |  |                    |                  |
|                                     | Conference Registration<br>Miles/ Meals/<br>Lodging | Participation in the instate conference and seminar  | Travel and accommodation           |  |  |  |                    | \$7,000          |
|                                     |   |  |                                    |  |  |  | <b>Sub Total</b>   | <b>\$7,000</b>   |
| <b>Travel Outside Minnesota</b>     |   |  |                                    |  |  |  |                    |                  |
|                                     | Conference Registration<br>Miles/ Meals/<br>Lodging | Out of state conference. Attandacne and paper presentation in seminar and workshops organized by Universities, Non-profit or For Profit Organizations. | Paper presentation                 |  |  |  |                    | \$6,000          |
|                                     |   |  |                                    |  |  |  | <b>Sub Total</b>   | <b>\$6,000</b>   |
| <b>Printing and Publication</b>     |   |  |                                    |  |  |  |                    |                  |
|                                     | Printing  | Stationery and Printing  | Research Report and Onine Contents |  |  |  |                    | \$10,000         |
|                                     | Publication   | Final report and Education Materials   | Publication for education          |  |  |  |                    | \$15,000         |
|                                     | Printing  | Office stationery, paper, education materials, reports   | Office Stationeries                |  |  |  |                    | \$2,000          |
|                                     |   |  |                                    |  |  |  | <b>Sub Total</b>   | <b>\$27,000</b>  |
| <b>Other Expenses</b>               |   |  |                                    |  |  |  |                    |                  |
|                                     |   | Miscelleaneous   | Contengencies                      |  |  |  |                    | \$20,000         |
|                                     |   |  |                                    |  |  |  | <b>Sub Total</b>   | <b>\$20,000</b>  |
|                                     |   |  |                                    |  |  |  | <b>Grand Total</b> | <b>\$420,000</b> |



Classified Staff or Generally Ineligible Expenses

| Category/Name | Subcategory or Type | Description | Justification Ineligible Expense or Classified Staff Request |
|---------------|---------------------|-------------|--|
|---------------|---------------------|-------------|--|

Non ENRTF Funds

| Category         | Specific Source | Use | Status                     | Amount |
|------------------|-----------------|-----|----------------------------|--------|
| <b>State</b>     |                 |     |                            |        |
|                  |                 |     | <b>State Sub Total</b>     | -      |
| <b>Non-State</b> |                 |     |                            |        |
|                  |                 |     | <b>Non State Sub Total</b> | -      |
|                  |                 |     | <b>Funds Total</b>         | -      |

## Attachments

### Required Attachments

#### *Visual Component*

File: [4481567c-02c.docx](#)

#### *Alternate Text for Visual Component*

### Optional Attachments

#### *Support Letter or Other*

| Title   | File                              |
|---|-----------------------------------|
| Vision and Mission of Implementing Organization | <a href="#">1b55bc57-2f0.pdf</a>  |
| DICA Power Point Presentation in Pdf            | <a href="#">5a96694c-4c4.pdf</a>  |
| Narayan Dhakal - Budget Detail                  | <a href="#">dc042e00-b68.docx</a> |

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Does your project have patent, royalties, or revenue potential?**

Yes,

- Patent, Copyright, or Royalty Potential

**Does your project include research?**

Yes

**Does the organization have a fiscal agent for this project?**

No

