

Embassy Science Fellows

Professional Development Opportunity for DOI Scientists

The Embassy Science Fellows Program invites applications from throughout the U.S. Department of the Interior (DOI) headquarters and Bureau staff for one-to-three-month technical assignments at U.S. posts abroad. The goal of the program is to provide expertise in science, mathematics, and engineering to support the work of embassies, consulates, and missions of the State Department while providing international experience to DOI staff. Nine other agencies participate in the program.

BACKGROUND

The Department of State (DOS) and DOI have complementary strengths and needs. DOS manages international relationships through diplomacy but needs input from the science and engineering community to formulate policy in certain areas. The Embassy Science Fellows Program (ESFP) provides a valuable mechanism for the U.S. Government (USG) to advance national research and development priorities through international collaboration and provides a venue to develop relationships which will benefit DOI. The ESFP supports collaboration with host government and local entities to meet multiple objectives: advancing USG science policy, diplomacy and development objectives; complementing and supporting bilateral, regional or global cooperative USG science and technology (S&T) activities; and strengthening the international science & technology capabilities of DOS, the U.S. Agency for International Development (USAID) and participating agencies.

ASSIGNMENT ACTIVITIES

Embassy Science Fellows typically spend from 1-3 months at foreign posts, while remaining DOI employees. The duration of the assignment varies according to the needs of the Post and the availability of the applicant, but an average stay is approximately 6 weeks. During their assignment, Fellows work closely with the Science Counselor and/or other embassy staff involved in S&T issues. In general, the Fellow serves as a visiting "consultant" to the Embassy. Depending on the needs of the Embassy, the Fellow may be called upon for such responsibilities as:

- meet with foreign colleagues in ministries, universities, and other research organizations;
- furnish expert advice and consultation to host country colleagues, officials or institutions;
- conduct research, surveys, interviews or assessments on S&T topics identified by overseas posts;
- perform site visits to develop expertise in that country's science and engineering system;
- assist with preparations for conferences and meetings taking place in the host country;
- write reports of a technical or policy nature that may be used in DOS reporting; and/or,
- provide expert advice on formulation of bilateral and/or multilateral activities and foreign policy.

In addition to the personal experience of living and working abroad, the DOI employee gains direct experience on U.S. embassy operation, foreign policy development and implementation, and insight into how scientific and technical issues intersect foreign policy concerns. Moreover, the experience affords both the individual employee and DOI a deeper understanding of the science and engineering system and institutions of one or more foreign countries.

ELIGIBILITY

U.S. citizenship is required. Eligible participants must have a science/engineering background. In addition, they must have at least 1 year of continuous Federal service, and be assigned to an established and valid position at DOI. Maximum participation in the program is twice.

CLEARANCES

A medical clearance from State is required for fellowships of more than 59 days. Employees must be able to provide proof of a national criminal check (NACI). Some fellowships may require a secret-level security clearance which will be processed by the State Department. Processing of security clearances can take 4 months or longer from the time the candidate submits the necessary forms to the State Department.

MATCHING OF AGENCIES' INTERESTS

These developmental assignments must be agreed to in advance by the Fellow, his or her DOI supervisor, the hosting Embassy, and the appropriate DOS bureaus. This agreement includes the work that the Fellow will perform at the Embassy, the Embassy staff with whom the Fellow will work, and the terms of cost-sharing between DOI and the DOS.

DOS solicits requests from embassies and consulates for experts for specific work assignments. However, the State Department is willing to explore proposals from agencies looking to enable their work. Interested DOI employees are expected to explore with their supervisors the feasibility of such a professional development assignment, their mutual preferences for countries or regions, and general time frame for availability (e.g. "6 weeks in late fall"). Following are a brief description of the Embassies' needs; the attached solicitations will provide greater detail.

Astana, Kazakhstan: provision of technical assistance and policy advice on climate change issues and low-emission development strategies to government agencies.

Bangkok, Thailand: assistance with technical advice and support in human and institutional capacity development activities; including building the capacity of Thai stakeholders in development and preparedness for environmental challenges.

Beijing, China: assistance with improved disaster preparedness and management.

Bucharest, Romania: work with officials to draft national and regional regulations for shale gas drilling and production.

Freetown, Sierra Leone: work with the Sierra Leone Environmental Protection Agency to create policies and strategies, advise organizational structures, identify needs, and provide specific science expertise.

Hanoi, Vietnam: work with CITES-Management Authority to pilot a test system to monitor and control the importation of hunting trophies, address the abuse of hunting permits.

Islamabad, Pakistan: review current data on climate change and melting glaciers; provide training sessions, professional-level discussions, and consultations with government water resource managers, university and research centers and civil society organizations active in the water sector.

Jakarta, Indonesia: provide technical assistance to advance U.S. government science and technology cooperation with the Indonesian government.

Kolkata, India: help the U.S. government understand the range and depth of ongoing scientific collaboration by identifying areas of further cooperation and advise on the engagement of students and the scientific community to promote innovative partners and programs.

N'djamena, Chad: collaborate with University of Ndjamenan researchers and administrators along with the government of Chad, donors, and Lake Chad representatives to identify current and future research priorities and funding sources to support science-based solutions for the disappearance of Lake Chad.

Paramaribo, Suriname: assist the Ministry of Physical Planning to implement a GIS program and develop the capacity of the necessary staff to continue data collection from which the government can make rational policy decisions on forest and environmental management.

Reykjavik, Iceland: enhance the bilateral science research ties with Iceland in the key Mission Strategic Plan priority of the Arctic, advance the Mission's objectives, and work with the Stefansson Arctic Institute on various initiatives.

Tashkent, Uzbekistan: provide technology commercialization training to Government of Uzbekistan officials and scientists as well as assess the commercial potential of Uzbekistan's current scientific facilities and projects.

Tbilisi, Georgia: contribute to the work of the Tbilisi Embassy and the USAID Mission under the supervision of USAID's Office of Energy and Environment in forestry and natural resource management policy, climate change policy and development, the USG Enhancing Capacity for Low Emission Development Strategy, and emissions inventories and planning.

Antananarivo, Madagascar: Consult on the development of ecotourism coursework

Guangzhou, China: Multiple posts to: assess risks to water quality and supply; assess risks to water quality and supply; and evaluate disaster preparedness, determine causes of biodiversity loss.

Suva, Fiji: Improve screening methods for plant viruses, staff capacity building

Vientiane, Laos: Developing a regional approach for climate change affecting Mekong River tributaries.

Majuro, Marshall Islands: Lead a national coastal resources inventory

Wellington, New Zealand: Multiple opportunities including: Developing risk models to assess building earthquake resilience; enhancing management ecology to enhance freshwater environments; consulting on achieving sustainable management of coastal environments.

Lisbon, Portugal: Advising by a research associate on issues of marine science and/or energy security

Vilnius, Lithuania: Advising on energy efficiency in military applications

EXPENSES AND TRAVEL

It is intended that timing of these assignments be coordinated for minimum disruption of the DOI staff member's regular workload. **Individual offices are responsible for the expenses of their employees during their Embassy Science Fellow tenure, including salary and benefits, international travel, two training courses (one in Washington DC) and a reduced fraction of the M&IE portion of per diem for the locality.**

For those applying for the following opportunities:

- Tbilisi, Georgia
- Bucharest, Romania
- Beijing, China
- Jakarta, Indonesia
- Kolkata, India
- Vientiane, Laos
- Antananarivo, Comoros
- Guangzhou, China
- Lisbon, Portugal
- Bangkok, Thailand
- Majuro, Marshall Islands

There is a *possibility* that supplementary funding would be available to defray some or all of the costs. If you are interested and appropriate for the assignment, please apply, and funding possibilities can be explored if your candidacy is put forward to the Embassy.

Embassies will provide, at a minimum, housing, office space and infrastructure, including a computer and official in-country travel.

APPLICATION PROCESS

If you are interested, please secure permission from your supervisor to apply. Please use the attached application form to apply for particular assignments at specific posts.

All non-USGS DOI applicants must submit the application form to Colleen Castle at colleen_castle@ios.doi.gov by COB **August 9th**. This is a priority deadline; applications submitted afterwards may still be considered, but submissions before this deadline are preferred.

USGS applicants must submit their application form to Jean Noe Weaver at jweaver@usgs.gov.

NPS does not support staff participation in this Fellowship program

All BLM applicants should also copy their applications to Olivia Sierra (osierra@blm.gov) in the BLM Office of International Affairs.

Candidate applications are ultimately screened by the requesting embassy/consulate which then reviews and selects the final Fellow.

APPLICATION FORM (see next page)

Embassy Science Fellowship Program 2012-13 Application

Please attach a Resume/Curriculum Vitae to this form

Note: This application requires your supervisor's signature in order to be considered for the ESF program
Forward signed application (3 pages) & Resume/Curriculum Vitae to Agency Coordinator

1. Name (Last, First, MI):

2. Name of Agency and Agency Coordinator:

3. Current position:

Area(s) of Expertise:

4. Office contact information:

Address

Email:

Phone:

Fax:

5. Home Contact Information:

Address:

Phone:

Email:

Emergency Contact Person:

6. Proposed Post for Fellowship:

1st Choice:

2nd Choice:

3rd Choice:

5. Proposed Dates for Assignment/Availability (list for each proposed post, if applicable):

1st Choice:

6. Discuss desired assignment(s) highlighting relevant experience, training, and what you would accomplish if selected—use separate pages:

7. Language Ability: evaluate skills using excellent, good, poor, fair or native fluency.

Language

Writing

Speaking

Reading

8. Have you previously been granted a security clearance?

If so, please specify the issuing agency, date issued, and the level of clearance granted:

Confidential/Secret/Top Secret

9. Have you previously been issued a medical clearance by the Department of State?

If so, please provide the date that the clearance was issued:

10. Have you previously completed Department of State training, Security Overseas Seminar, MQ911 or its equivalent? If less than five years ago, provide the classes taken and the dates completed:

11. Previous Professional International Experience:

Date (from-to)

Country

Reason/Project

ACKNOWLEDGMENTS

By signing below, you agree to be considered for participation in the Embassy Science Fellows Program. Your information will only be shared with appropriate Department of State personnel and your parent agency. It does not constitute a guarantee that you will be placed nor are you bound to accept any assignment offered.

Signature of Applicant:

Date:

By signing below, you agree that, to the extent that travel funds are available, if the applicant is matched, the office/agency has sufficient funds to support the Embassy Science Fellow's round-trip international travel (as much as \$4000) and if not located in the Washington, DC, area, domestic travel to the Foreign Service Institute located in Arlington, Virginia, to take a two-day mandatory course (total tuition cost including online course: \$460).

Approval by Supervising Official:

Date:

MRN 12 Antananarivo 326

SUBJECT: Embassy Science Fellows Program 2012 - Embassy Antananarivo for the Comoros

1. (U) Subject of Proposal and General Information

- Topic: Development of Ecotourism Curriculum & Partnership Project
- Host institution: University of Comoros
- Time frame: October 1 – December 19, 2012 (flexible)
- Additional skills: Knowledge of French
- Security clearance requirement: None

2. (SBU) Proposal Description

-- Comoros is made up of three volcanic islands to the north of Madagascar in the Indian Ocean. Once distinguished for having more coups than any other country, Comorans have placed themselves firmly on the democratic path with three peaceful transitions of power in the last decade. The Muslim nation has a history of good relations with the United States, though many poor Comorans are drawn to study in Iran, Pakistan, and Lybia where they grow more radicalized in their worldviews. This was the case with the late Harun Fazul, mastermind of the embassy bombings in Tanzania and Kenya, who recently met his end in Somalia.

-- Realizing the lack of higher education was a root cause of underdevelopment and religious radicalization, former President Assoumani Azali created a university for the country in 2003. The University currently offers three year degrees in nine different colleges, with 5,500 enrolled students. The Embassy's strategic engagement with the University has been to help them develop a modern, American-style curriculum, particularly focusing on tourism, which is the islands' most promising sector. USAID is providing \$50,000 to fund partnerships with American universities that will develop the University's English language program, a pre-requisite for the international tourism market. The Public Affairs Section is focusing its efforts on both curriculum development and the tourism sector, including using the Ambassador's Fund for Cultural Preservation to renovate the islands' historic sultans' palaces.

-- The Comoros' unique and pristine environment holds the potential to make it a major ecotourism site. Because of its academic isolation and low level of development, the Comoros has not been able to take full advantage of its unique environmental resources. Yet, driven by University-led expertise on how to develop the tourism potential of these sites, the country could fast become a tourism hot spot. The first step in developing this expertise is creating a curriculum and training teachers to engage and empower students and indigenous expertise in this area.

-- The Embassy Science Fellow (ESF) will work with administrators and teaching staff at the University of Comoros to assist the University in creating a curriculum in ecotourism, along with

working with staff members on developing potential longer term partnership projects that can build on the work of the USAID grant in technical fields related to ecotourism. The fellow will also coordinate short courses in tourism for students and presentations for tourism professionals, as well as foster collaboration with researchers and scientists between the U.S. and the Comoros in the ecotourism industry and related fields.

3. (SBU) Administrative Support

The University of Comoros will provide housing, office space, and in-country transportation for the fellow. The housing will be quite basic; running water, cell phone and internet connectivity, and electricity will be very limited and suffer frequent interruptions. The ESF should come prepared to not have access to many modern conveniences, including incoming mail service and adequate healthcare. The Embassy wishes to stress that this assignment will be a hardship and the fellow should come prepared for those conditions. The Embassy will be unable to fund any such services on behalf of the ESF. The Public Affairs Section will be present in the Comoros for the fellow's arrival and an FSO assigned the Comoros portfolio will spend much of their time in the Comoros, but is based in Madagascar. An American military civil affairs team is permanently located on the same island. Since there is no Embassy located in the country no pouch or check cashing services are available.

4. (SBU) RSO Concurrence

Madagascar is a two year assignment with a 25 percent hardship differential. RSO clears a Science Fellow for the Union of the Comoros with the provision that housing meets RSO approval.

MRN 12 Guangzhou 394

SUBJECT: Consulate Guangzhou's Application for 2012 Embassy Science Fellows Program

Subjects of Proposal and General Information

1. (U) SUMMARY: In response to reftel, ConGen Guangzhou requests that the Department identify an Embassy Science Fellow (ESF) to serve at post during the winter 2012 period up to February 2013. Post requests ESFs that can conduct projects in one of four areas: (1) innovation capacity and policy; (2) water resources; (3) infectious diseases and public health; (4) biodiversity and climate change. Post appreciates the opportunity to submit proposals and believes an ESF would be greatly beneficial to Mission outreach, reporting, and U.S. foreign policy goals. End SUMMARY.

2. (U) Prospective ESFs are encouraged to spend two-to-three months at Post during the winter 2012 period up to February 2013. Mandarin language skills are ideal but not required. ESFs will receive support and guidance from ESTHOffs and possibly other relevant sections and will be supervised by the E/P Section Chief. Specific work projects will be finalized based on post priorities and the candidate's experience and expertise. A security clearance is not/not required; however, ESFs must, at a minimum, undergo a National Agency Check with Local Agency Check (NACLAC).

Proposal Description 1: Innovation Capacity and Policy

3. (U) As China attempts to move up the value chain and away from heavy manufacturing and exports, cultivation and development of "indigenous innovation" has become a national priority. Understanding China's "innovation capacity" is critical to understanding China's future development trajectory and its competitive status in the global economy. Guangdong, China's richest and most populous province, has taken the lead in this area by promulgating the nation's first province-level innovation policy. While these policies are designed to support domestic R&D capabilities, they could also have a strong impact on U.S. firms in terms of regulations on technology transfers and the development of new standards.

4. (SBU) Consistent with OES/STC's stated priority in **enhancing science, technology, and innovation cooperation**, Post requests the Department identify an ESF that could help the Mission better understand China's budding "innovation capacity." Prospective candidates may be drawn from the National Institute of Standards and Technology, the National Science Foundation, the Department of Energy, among other relevant agencies. The ESF would work with local science and technology bureaus, research institutions like the Shenzhen Institute of

Advanced Technology, prominent research universities like Sun-Yatsen University, and companies to better understand how innovation is being cultivated and developed in south China. Proposed projects include:

- Researching Guangdong's innovation policy and its implementation to see how it compares to international best practices and standards.
- Determining how research laboratories and universities interact with the private sector to bring new technologies to market.
- Assessing the state of China's science education system (undergraduate, graduate, vocational) to determine whether it meets the needs of business and government.
- Examining innovation policies related to technology transfers in different sectors.
- Assessing whether emerging standards for new technologies are creating significant trade barriers or market access issues for U.S. firms.

Proposal Description 2: Water Resources

5. (U) On the surface south China's plentiful rainfall would seem to indicate the region needs little assistance in a country which has been struggling to find reliable water, but a deeper look reveals a region still grappling with an enormous challenge. Pollution, overuse by industrial sources, and weak monitoring and management systems threaten access to clean water for a region with a population of 220 million. Large quantities of heavy metal contaminants have been found by Greenpeace and other organizations in local waterways and many of the region's rivers are not suitable even for industrial use. Official documents reveal that "the contradictions between water resource supply and demand are becoming more prominent by the day."

6. (SBU) Consistent with OES/STC's stated priority in **managing oceans, environmental, and natural resources**, Post requests that the Department identify an ESF to assess risks to water quality and supply in south China, work with local government officials to more effectively monitor water pollution and utilization, and identify opportunities for U.S. technology and consulting services. The ESF would work to further strengthen our relationships with government officials and corporate leaders responsible for managing water resources including the Water Resources Bureau, the Environmental Protection Bureau, and the Water Investment Group, Inc. The specialist would also work with universities such as Sun Yat-Sen University and NGOs working on water issues such as Businesses for Social Responsibility. Proposed projects include:

- Assess existing and potential threats to regional water supply as well as the impact of current water construction projects and industrial use on the environment.
- Work with local authorities to develop comprehensive water testing criteria, methodologies, and safeguards.
- Work toward supporting sub-national cooperation on water management between the Guangdong Environmental Protection Department and the USEPA.
- Create recommendations to improve water management and distribution, including more rational pricing of water resources and of fines for pollution.
- Promote the use of U.S. technology and services in improving access to clean water and limit environmental degradation.

Proposal Description 3: Infectious Diseases

7. (U) South China is a hot-spot for emerging infectious diseases. SARS originated here and influenza outbreaks are frequent. Because of the large population and close proximity with poultry and swine, many experts believe that the potential is high for the next human influenza pandemic to begin in south China. Provincial and municipal health officials take the threat of a pandemic outbreak seriously and have mobilized significant resources to monitor and prevent outbreaks of emerging infectious diseases. Their willingness to engage international partners in cooperative efforts has grown dramatically since the SARS outbreak. However, China's ability to deal with the threat of infectious diseases is still deficient, and a lack of transparency in this area persists. There is much more to learn about this constantly changing situation, and the potential impact for U.S. interests is immense.

8. (SBU) Consistent with OES/STC's stated priority in **promoting health systems and preparedness**, Post requests that the Department identify an ESF that would work to expand and deepen our outreach to government health agencies, including the provincial and municipal Bureaus of Health and local offices of China's Center for Disease Control and Prevention, as well as health care institutions, on preventing emerging infectious diseases and anti-biotic resistant varieties of well known diseases. He or she will work with these bodies to expand south China's capacity to prevent and manage outbreaks of emerging infectious diseases, and look for ways to expand U.S. government cooperative programs on this issue. The ESF would also work with local researchers at institutions such as the Guangzhou Institute of Biomedicine and Health and the Guangzhou Institute of Respiratory Diseases. Proposed projects include:

- Enhance our relationship with contacts in government, academia and the medical industry.

- Develop a program to improve south China's capacity to monitor, prevent and cope with outbreaks of infectious diseases.
- Determine the extent to which antibiotic resistance is growing in the region and create a program for physician education to reduce overprescribing of antibiotics.
- Make recommendations on how the USG can support China's efforts to build capacity in these areas.

Proposal Description 4: Biodiversity and Climate Change

9. (U) South China is both uniquely vulnerable to climate change impacts and enjoys one of the world's most complex regions for biodiversity. Much of China's economic infrastructure, including expanding nuclear power facilities, reside in low-lying coastal regions like the Pearl River Delta where increased severe weather and flooding could have a devastating impact. Dynamic ecosystems, on the other hand, provide natural resources as well as important ecosystem services like water filtration, climate regulation, waste decomposition, and soil formation. Biodiversity also has a strong, mutual connection with climate change. Rapid loss of biodiversity not only can be symptomatic of climate change but also reinforce these same trends. Better understanding of this relationship would provide a strong foundation for policymakers to pursue climate change adaptation strategies and contribute to global scientific efforts to preserve and protect biodiversity.

10. (SBU) Consistent with OES/STC's stated priorities in **addressing climate change and managing oceans, environmental, and natural resources**, Post requests that the Department identify an ESF that would work to promote scientific cooperation on biodiversity research and explore ways south China is pursuing climate change adaptation strategies. The ESF would work with provincial Development and Reform Commissions, Forestry bureaus, Environmental Protection Bureaus, disaster preparedness authorities, universities and research institutes to gauge how biodiversity is changing in south China and how climate change is factoring in local decision-making and research agendas. Wetland protection efforts, in particular, have been emphasized under the China Biodiversity Partnership and Framework for Action (CBPF).

Proposed projects include:

- Determine drivers of biodiversity loss in south China and calculate estimated impact on local economic development.
- Evaluate disaster preparedness for severe weather events in terms of infrastructure, flood control, and coastal sea defenses.
- Liaison with local researchers and civil society groups that are engaged in biodiversity research, wildlife conservation, or habitat preservation.

- Work to build collaborative U.S.-China partnerships on biodiversity and climate change research.

Administrative Support

11. (U) Post can provide appropriate housing and office space up to February 2013 and will arrange necessary logistical support for the ESF as described in reftel. Funding for in-country travel will be provided pending future funding availability.

Regional Security Office (RSO) Concurrence

12. (U) ConGen Guangzhou is a two year assignment with a 20 percent hardship differential. RSO clears this message.

MRN: 12 Vientiane 480

Subject: Embassy Science Fellows Program 2012 (Vientiane, Laos)

1. Subject of Proposal and General Information

Topic: Climate change assessments and/or environmental impact assessments for tributary dams.

Host institution: Mekong River Commission Secretariat

Time Frame: Request Embassy Science Fellow to work two months beginning in fall 2012, in Vientiane, with possible travel to Viet Nam and Cambodia.

Additional Skills: A medical clearance is required for fellowships of more than 59 days.

Security Clearance Requirements: Possession of a security clearance is not required.

2. Proposal Description

Embassy Vientiane requests a science fellow with expertise in the field of climate change assessments or environmental impact assessments for tributary dams to work directly with scientists and experts at the Mekong River Commission Secretariat (MRCS) in Vientiane, Laos. The environmental impact of proposed hydropower projects, along with efforts to develop more sustainable uses of the Mekong River and its tributaries, are primary concerns for Secretary Clinton. Throughout the fellowship, the participant will strengthen capacity of MRC staff through mentoring and ongoing exchanges in expertise and methodologies. In addition, the fellow will strengthen the relationship and collaboration between the MRC and the USG. There may be additional opportunities for the fellow to travel to Phnom Penh, Cambodia to further collaborate with experts working in the second office of the MRCS and to Can Tho, Vietnam to meet with Forecast Mekong representatives. The additional travel would be subject to the availability of housing and/or travel funds at the other Embassies once the dates are specified.

Host-institution background:

The Mekong River Commission (MRC) started in 1995 as an official intergovernmental body and multilateral organization that serves as information clearinghouse and coordinator among the lower Mekong countries of Laos, Thailand, Vietnam, and Cambodia. Governments in the Mekong Basin are facing complex decisions regarding

basin development. To help inform Lower Mekong Basin governments, the MRC has developed several tools, such as the Basin Development Plan, to help policy makers analyze economic, environmental and social trade-offs to reach balanced decisions. While not a donor to the MRC, the USG has supported exchanges to the U.S. for MRC staff, funded an independent assessment of the MRC's analytical and planning efforts to strengthen overall planning, provided USGS expertise, and continues to explore ways to assist the MRC through the Lower Mekong Initiative (LMI).

Specific work assignments:

Climate Change and Environmental Impact Assessments

The ESF would be instrumental in providing technical assistance to the Environment Division in one or more of the following areas:

- Climate Change impact assessment and climate change scenarios assessment
- Climate change adaptation and resilience
- Trans-boundary environmental impact assessment for emerging development projects
- Strategic environmental assessment for potential development sectors
- Biodiversity conservation and ecosystem services
- Environmental economics and valuation

Based on the profile of the candidate, the Environment Division can propose a specific study to be realized by the fellow in accordance to the needs of the Division.

Negative Impact Mitigation Measures for Tributary Dams

The ESF would play an important role in working with experts in the Initiative on Sustainable Hydropower Division of the MRC (ISH), which is due to complete an assessment of impact mitigation measures for existing and proposed Lower Mekong Basin tributary dams by 2013 using a generic approach. As of today, there are 120 tributary hydropower projects in the current MRC hydropower database. The fellow will put forward guidance and recommendations to ISH and produce an initial scoping assessment of mitigation measures for existing and proposed Lower Mekong Basin tributary.

Development of Regional Approaches in the Lower Mekong

In line with the LMI objective, the fellow will also promote the development of regional approaches to transnational challenges in the lower Mekong sub-region by enhancing collaboration and by building capacity within the four Southeast Asian partnered nations, which are the same four MRC member states of Laos, Thailand, Vietnam, and Cambodia. The fellow will help advance the LMI goal of strengthening local and regional capabilities and human resources in several of the LMI areas, or "pillars," of education,

environment, health, and infrastructure through mutual cooperation and the sharing of relevant technical expertise, resources, and comparative advantages.

3. **Administrative Support**

Post is fully committed to providing housing (during the months of September and October), supplemental office support (in addition to office space provided by the host agency-Mekong River Commission), in-country travel arrangements, and other support as necessary.

4. **RSO Concurrence**

While Embassy Vientiane is a two year assignment with a 25 percent hardship differential, the RSO has cleared. Post MGT and EXEC have also cleared.

12 Vilnius 332

SUBJECT: Embassy Science Fellows Program 2012 (Lithuania)

1. (U) Embassy Vilnius submits two proposals for Embassy Science Fellows (ESF).

(U) Proposal One: Energy Security Fellow

2. (U) TOPIC: Assist the Energy Security Center to implement energy efficiency projects in military applications.

HOST INSTITUTION: Energy Security Center, Vilnius, Lithuania

TIME FRAME: up to 90 days in 2012 (September to December) is preferred.

SKILLS: The Science Fellow should have experience as a hands-on energy policy advisor, along with expertise in the field of energy security at military bases, energy supplies and infrastructure protection, and energy efficiency in military applications.

Security clearance: Not required.

3. (U) PROPOSAL DESCRIPTION

A Science Fellow is expected to enhance Lithuania's energy security by offering strategic and practical advice on energy-related issues. The Fellow would work with the National Energy Security Center (ESC), a new institution that was established in Vilnius, Lithuania in January, 2011. The goal of the ESC is to assist the Government of Lithuania implement national energy security strategies and strengthen the energy security positions of NATO. The Energy Security Center is expected to receive accreditation as a NATO Center of Excellence later this year. Following accreditation, the center will advise NATO on energy security, energy supplies, infrastructure protection, and energy efficiency. The center will also organize exercises and training and act as a conduit for cooperation among Lithuanian academic institutions and business establishments.

The ESC especially needs assistance with initiating, conducting and supporting research and development projects on applying energy innovations in military applications. It also needs assistance in developing strategies to engage the public on various ways to strengthen the world's energy security. In November 2012 the ESC will host the Allied Command Transformation Concept Development & Experimentation Conference and Energy Security Workshop. Also, by the end of this year the ESC plans to publish a study on "Energy Management in the Expeditionary Environment: Front-End Analysis and Proposed Solutions". These and other projects need expert advice and assistance.

4. (U) ADMINISTRATIVE SUPPORT

The Fellow will work closely with the ESC and officers from Embassy Vilnius' Pol/Econ section who are responsible for the energy and ESTH portfolios. The Embassy will provide housing (most likely in shared TDY apartments) and, if needed, a work space for the Science Fellow, although the ESC may be able to assist with both. We expect the ESC to provide local transportation support. Post is willing to provide logistical support where possible.

5. (U) CONCURRENCE: RSO, DAO and Management have cleared on this proposal.

(U) Proposal Two: Tuberculosis Fellow

7. (U) TOPIC: Assist Association "Stop TB" to create an advocacy strategy for improving public involvement in tuberculosis (TB) care and prevention in Lithuania.

HOST INSTITUTION: Association Stop TB

TIME FRAME: up to 90 days (September 2012 to March 2013) is preferred.

SKILLS: The Fellow should have an advanced degree in public health, social sciences, communication or equivalent. Experience or advanced training in advocacy, communication or social mobilization (theory and practice) and experience in planning and implementing of community-based and country-level ACSM (Advocacy, Communications and Social Mobilization) programs is preferred.

Desired specific competencies, skills and knowledge:

- Good analytical skills;
- Understanding of how ACSM contributes to TB prevention and control;
- Understanding of how ACSM should be applied in different countries and target audiences;
- Understanding of the full cycle of ACSM from research and planning to implementation.

Security clearance: Not required.

8. (U) PROPOSAL DESCRIPTION

The Science Fellow will assist the Association Stop TB in creating an effective advocacy strategy for improving the community's involvement in TB care and prevention in Lithuania. The Fellow will select a specific problem or policy issue they wish to address, analyze and research the problem and develop specific objectives and an action plan for stop TB advocacy work. The Fellow will also help Stop TB to identify internal and external resources for the implementation of the advocacy action plan.

9. (U) ADMINISTRATIVE SUPPORT

The Fellow will work closely with Stop TB and officers from Embassy Vilnius' Pol/Econ section who are responsible for the ESTH portfolio. The Embassy will provide housing (most likely in shared TDY apartments) and, if needed, a work space for the Science Fellow and local transportation support. Post is willing to provide logistical support where possible.

10. (U) CONCURRENCE: RSO has Management have cleared on this proposal. Vilnius is a three year assignment with a 5 percent hardship differential.

MRN: 12 Wellington 232

SUBJECT: New Zealand: Embassy Science Fellows Program 2012

Subject of Proposal

1. (U) Post proposes placement of a fellow from the Embassy Science Fellow Program (ESFP) to assist the U.S. Mission to New Zealand.

Topic: The fellow (ESFPer) would participate in one of three overall topics (in priority order):

- a) *Resilient cities (to natural hazards)* – working with GNS Science (Geology, Geophysics, and Nuclear Science);
- b) *Water quality and availability* – working with the National Institute of Water & Atmospheric Research (NIWA); or
- c) *Marine and coastal conservation* – working with the Department of Conservation.

Preferred time frame and length of fellowship: Post envisions the fellowship to last three months (a minimum of one month) and prefers a timeline of September through November 2012.

Desired skills: Post requests ESFPer to have expertise in seismic engineering/risk modeling, water quality, or coastal and marine ecosystems management. Post would prefer ESFPers additionally have a good sense of economic issues.

Medical and security clearance: A medical clearance is required, and although a security clearance of “SECRET” level or higher is not required for work, it is welcome.

Proposal Descriptions

2. (U) Due to the 7.1 magnitude earthquake in September 2010, the 6.3 earthquake in February 2011 and the 6.0 earthquake in June 2011, New Zealand’s second largest city in Christchurch was nearly destroyed with over 33% of the buildings in the central business district alone, needing demolition. Several regions are still vulnerable to large earthquakes. The New Zealand Government has prioritized community, organizational, and infrastructural resilience to natural hazard events. Post believes an ESFPer would be a great fit to assist ongoing in the preparedness for future hazards. The ESFPer would work closely with GNS Science, a Crown Research Institute entity, to coordinate resilient buildings and infrastructure construction and/or develop risk models. The ESFPer’s work would be coordinated through the Natural Hazards Research Platform (NHRP). Post requests the ESFPer have expertise in seismic engineering or risk modeling.

3. (U) Agriculture is the dominant use of land in New Zealand and has had the most widespread impact on water quality. The agriculture sector accounts for over half of New Zealand’s greenhouse gas emissions. Due to the sector’s increasing levels of production (particularly in dairy farming), New Zealand has been linked to increases in water pollution which has affected lakes, rivers, caves and bays. Many waterways such as the Waikato and Manuwatu River are now unsafe for swimming. Post envisions ESFPer to work closely with the National Institute of Water & Atmospheric Research (NIWA), a Crown Research Institute established by the Government of New Zealand (GNZ), to undertake scientific research and to improve the

ecological health of New Zealand's freshwater environment. A possible project for the ESFPer would be to enhance management of the riparian areas, ephemeral streams and or salt marshes to restore local and downstream habitats. Post would request the ESFPer to have expertise in water quality and availability.

4. (U) The New Zealand Department of Conservation (DOC) monitors the effect and implementation of Regional Coastal Plans (RCPs). RCPs are plans prepared by regional councils and unitary authorities for the coastal marine area of a region. The DOC's purpose is to assist these councils in achieving the sustainable management of their coastal environment which include objectives, policies and rules that govern what activities the councils will allow, control or prohibit in the coastal environment. The plans are a tool used to manage any actual or potential effects from the use, development, or protection of the coastal marine area. Post foresees ESFPer assisting DOC in this process or another related project within the DOC with a marine ecosystem or marine energy deployment focus. Post would request the ESFPer to have expertise in marine ecosystems management or marine energy generation.

Wellington Declaration

5. (U) On November 4, 2010 Secretary Clinton signed the "Wellington Declaration" with New Zealand Foreign Minister Murray McCully during her visit to New Zealand. The Declaration reaffirmed close ties between the two countries, and outlined future practical cooperation in a number of specific areas as well as promotion of political dialogue. The ESFP, if granted, would represent the mission's commitment to the declaration and the overall improvement of the bilateral relationship.

Administrative Support & RSO Concurrence

6. (U) Post assures that it is committed to providing the following assistance necessary for the incoming fellow: housing, office support, and in-country travel arrangements (if applicable), and any other logistical support information. Post has cleared potential fellowship through the front office and Management sections.

7. (U) The posting to Wellington is 3 years. RSO has cleared the following proposal and holds no objections.

MRN: 12 Suva 336

Subject: Embassy Science Fellow 2012 Proposal (Suva, Fiji)

1. Subject of Proposal and General Information: This project seeks to improve the Pacific's food security and resilience to climate change, promoting scientific exchange and relationships, while strengthening the region's only gene bank and a major element of its intellectual infrastructure.

Title: Improved screening methods for badna viruses of yam (*Diocorea* spp).

Host Organization: Secretariat of the Pacific Community, Centre for Pacific Crops and Trees

Preferred timeframe and length of fellowship: a three-month fellowship will have the greatest likelihood of success. Post accommodations are available during the period July through early September.

Language: English

Security clearance: Not required

2. Background Information: The Fellow will work at the Centre for Pacific Crops and Trees (CePaCT) in Suva, Fiji to improve screening methods for badna viruses of yam (*Diocorea* spp). CePaCT of the Secretariat of the Pacific Community (SPC) has 266 accessions of the eight species in its yam collection, originated from eight Pacific island countries. It conserves the largest *in vitro* collection of unique Pacific yam varieties. CePaCT is a key element of the Pacific's food security, and integral to addressing the region's climate change adaptation challenges. The two yam species in particular, *D. alata* and *D. esculenta*, have climatic tolerant traits to drought and high temperature. However, the presence of integrated badna viruses has made distribution of these accessions in the field impossible. Building the technical capacity of CePaCT staff in virus diagnostics is integral to sustainability of its virus indexing facility, would allow staff to effectively index its collection and ensure safe distribution of its genetic resources. Additional detailed science background will be provided via separate email message.

3. Objectives of the Science Fellow at CePaCT are:

A. To explore, establish and continue linkages and collaboration with international research institutes on the development of effective virus diagnostic methodologies.

B. To develop effective screening and cleaning methods for removing viruses from infected plant material

C. To build capacity of CePaCT staff (virus diagnostic officer and technician) on relevant virus detection methods, primer designing and sequence analysis.

D. To properly document and store protocol descriptions in appropriate CePaCT database folders for backup and future references.

4. Areas of Specific Expertise: The Fellow should be a virologist with extensive experience in molecular virology with emphasis on badna viruses, sequence analysis and primer designing. Expertise in virus detection and elimination methods for badna viruses is also desirable.

5. Administrative Support: Embassy Suva will provide administrative support necessary for the Fellow including housing from within Post's housing pool during the period July through early September.

6. RSO Concurrence: Embassy Suva is a three year assignment with a 20 percent hardship differential. RSO has no objection to hosting an Embassy Science Fellow for a period not to exceed 90 days.

MRN: 12 Lisbon 446

Subject: Lisbon, Portugal Embassy Science Fellow 2012 Request

General Information

1) (U) In support of Post's Mission Strategic Resource Plan, U.S. Embassy Lisbon requests an Embassy Science Fellow for Fiscal Year 2013. The Fellow should focus on marine science and or energy security. An Embassy Science Fellow in Lisbon would enhance the activities of the Energy, Environment, Science and Technology Committee of the U.S.-Portugal Bilateral Commission as well as the Mission's relationships with the Government of Portugal (GOP) and Portuguese research institutions.

Proposal Description

2) (U) Post seeks a fellow with a research specialty associated with marine science and or energy security, as these areas are shared priorities for both the USG and GOP. While not an exhaustive list, Post suggests that the fellow have expertise in one of the following areas:

a. Marine science and water resource management

In 2005, Portugal announced a National Maritime Affairs Strategy, which outlined the country's maritime goals until 2016. As a country with an extensive maritime history, Portugal is involved in marine robotics, marine biology, maritime modeling, fish stock management, and the management of its coastal and estuarial zones. Additionally, the GOP devotes resources to reclaiming its continental shelf; to designating and regulating marine protected areas; and to contributing to the EU Marine Strategy Framework Directive. The fellow should expect to spend a significant portion of the fellowship partnering with host country institutions in the Azores and may spend the majority of the fellowship at the University of the Azores in Faial, Horta.

b. Renewable energy technology

As part of its energy security efforts, Portugal hopes to produce 60% of its electricity from renewable energy sources by 2020. In the past, Portugal has subsidized programs for wind, wave, and solar energy innovation.

c. Other associated specialties.

3) (U) Post will work with candidates to define a program that combines the fellow's research specialty and interests with Post goals. Science fellows will participate in public outreach as a part of their program. Past Science Fellows in Portugal have conducted their work in a variety of ways, and Post is flexible to take best advantage of each fellow's background and qualifications.

Administrative Support

4) (U) Post can accommodate a fellow at any time of the year except for the months of August and December. Post will arrange in-country housing and travel, office space, and other logistical

support as outlined in Reftel and its attachments. The fellow should have a medical clearance valid for the duration of his or her stay. While not required, a security clearance is desirable.

5) (U) The assignment to Portugal is three years. This cable has been cleared by Post's Regional Security and Management Sections.

MRN: 12 REYKJAVIK 232

SUBJECT: REYKJAVIK, ICELAND, 2012 EMBASSY SCIENCE FELLOW PROPOSAL

1. (U) Post requests an Embassy Science Fellow to enhance the bilateral science research ties with Iceland in the key Mission Strategic Plan priority of the Arctic. Iceland has similarly prioritized Arctic issues as a key element of its foreign policy. The presence of an Embassy Science fellow would assist the Embassy with encouraging and facilitating increased cooperation in this important area.

Host Institution: The Fellow will work primarily with the Stefansson Arctic Institute.

Time Frame: Preferably, the fellowship would take place in September and October for approximately eight weeks. No medical clearance is requested, and a fellow staying less than 90 days does not need a visa. A security clearance is not required and no foreign language skills are necessary.

Skills Required: Knowledge of USG priorities related to the Arctic social sciences and familiarity with Icelandic research opportunities.

Security Clearance: None.

2. (U) Project Description: The Stefansson Arctic Institute (SAI) was established in 1998 and operates under the auspices of the Icelandic Ministry for the Environment. It is located in Akureyri in Northern Iceland and bears the name of explorer and anthropologist Vilhjálmur Stefánsson (1879-1962). The staff at the Stefansson Arctic Institute includes scientists with broad interdisciplinary research background and experience. The role of SAI includes a multi-disciplinary research cooperative forum and promote sustainable development in northern areas, facilitate and co-ordinate international Arctic research in Iceland. SAI is committed to provide facilities for scholars who pursue research relevant to Institute's agenda.

We request the assignment of an Embassy Science Fellow to Iceland for approximately eight weeks to advance Mission objectives and to work with the SAI on the following initiatives:

- As part of the Embassy representation, provide information about Arctic science and U.S. funding agencies to the Parliamentarians of the Arctic, who will hold their meeting Sept. 5-7th this year in Akureyri.
- Participate in the Arctic Councils Sustainable Development Working Group (SDWG) in Akureyri, hosted by the Ministry of Foreign Affairs.
- Assist with updating the Arctic Human Development Report, a preeminent Arctic social science research project.

- Develop U.S.-Iceland-Greenland connections and collaborations, possibly through the Cooperative Committee on Arctic Affairs “Iceland and Greenland Science Days” in Nuuk, Greenland in late September where scientists will be talking about current and future research.
- Arrange, in collaboration with other NSF programs, an international workshop to promote interdisciplinary research in the Lake Myvatn area. Myvatn is a very rich ecological and cultural system where many scientists have been working for decades. This workshop would bring together these researchers to discuss the potential for more collaboration internationally and across disciplines in order to gain a more complete understanding of coupled human and natural systems under conditions of change.
- Give lectures about U.S. scientific developments, particularly concerning the Arctic.
- Public outreach in support of the Embassy’s goals of highlighting U.S. research collaborations in Iceland.

3. (U) Administrative Support: The Fellow will work closely with SAI on the project. Thus, SAI has pledged to provide housing and work space for the Science Fellow. Access to transportation support from SAI is also likely. Post is willing to provide transportation, work space and logistical support where possible. The Fellow will work closely with the representatives from the Economic and Commercial Section responsible for the Energy and ESTH portfolios.

4. (U) RSO Concurrence: RSO has cleared on this proposal. Reykjavik is a two year assignment with a 10 percent hardship differential. RSO has no objection to the mission hosting a fellow for a period not to exceed 59 days.

MRN: 12 Majuro 92

SUBJECT: Embassy Science Fellows Program (Majuro, Republic of the Marshall Islands)

Subject of Proposal and General Information

1. (U) Subject: Coastal and Marine Ecosystems Management

Host Organization: Republic of the Marshall Islands Environmental Protection Authority (RMIEPA)

Preferred Time and Length of Fellowship: The preferred length is 2-3 months. The time frame is flexible but would begin no earlier than January 2013.

Additional Skills: Expertise in Geographic Information Systems is strongly preferred.

Security Clearance: Not required

Proposal Description

2. (U) Background Information: The Republic of the Marshall Islands (RMI) is an isolated collection of atolls and islands surrounded by some of the most beautiful coral reefs in the North Pacific. This nation is both immense and minute, 70 square miles of land dispersed over 750,000 square miles of ocean. To put this in perspective, the entire RMI is the size of Mexico with land only the size of Washington, D.C. Since the atolls and islands of the Marshall Islands are such small land masses to subsist on, even the slightest erosion or sea level change is significant and threatens the very survival of the RMI.

3. (U) Today, the extent to which the RMI is being disturbed by climate changes, coastal development and pollution remains unknown. A lack of RMI coastal mapping specialists, in addition to an outdated Coastal Resource Inventory (the last inventory was completed in 2004), leaves the RMI uninformed about the current environment and vulnerable to further damage.

4. (U) The Republic of the Marshall Islands Environmental Protection Authority (RMIEPA) has been the primary environmental agency of the RMI for the past 28 years. The EPA, managed by the Coastal and Land Management Division, uses the Geographic information System (GIS) and Global Positioning System (GPS) to collect spatial data including current land use, vegetation, coastal development, water quality and potential pollution sources. However, these methods are not the most cutting-edge technologies to display the current coastal environment.

5. (U) The Coastal Resources Inventory System (CRIS), on the other hand, is the ideal modern technology for the RMI because it has the ability to display trends using graphs and tables, as well as possessing the capability to predict environmental changes, and manage coastal

resources, using satellite imagery and RADAR. Rather than creating an inventory that then leaves the RMI in a defensive, reactionary position, an updated CRIS will allow the RMIEPA to be a more proactive agency, anticipating environmental issues before major crises.

6. (U) The RMI currently lacks Coastal Resource Mapping Specialists and other personnel with the skills to utilize the CRIS as a decision-making tool, but the RMIEPA does have the necessary equipment to conduct a pilot inventory. Such tools at EPA's disposal include ArcMap and GPS Pathfinder software, NOMAD handheld computers, and surveying equipment.

7. (U) Specific Work Project and Post Objective: The Embassy Science Fellow, with the full support of the RMIEPA, will spearhead a new national coastal resource inventory for the RMI, tracking the environmental changes that have occurred over the past decade. Specifically, the RMIEPA wants to focus on environmental degradation resulting from an influx in infrastructure development on Majuro Atoll.

8. (U) As an entirely coastal nation, local RMI construction companies use raw materials within RMI's coastal environment to count as fill material. Companies that sell sand for instance, end up dredging quarries to supply the demand. The EPA wants to protect the environment from being the casualty of infrastructure and economic development in the RMI. The EPA is therefore planning to utilize the Science Fellow's research to develop new policies for developers, aiming to minimize the degradation of the RMI environment. Due to the RMIEPA's status within the RMI government, the science fellow's inventory will be at the disposal of high-ranking officials who can use this mapping system to better target development assistance and to brief government officials on the current environmental situation.

Administrative Support

10. (U) For the duration of the fellowship, the fellow will occupy the guest apartment located under the Chief of Mission Residence (CMR) on Majuro lagoon. RMIEPA will supply a workstation and computer access in their main office building. Transportation will also be provided by RMIEPA when needed in coordination with other division's timetables (carpooling is encouraged due to limited number of vehicles).

RSO Concurrence

11. (U) Majuro is a two year posting with a 20 percent hardship differential. The RSO is in concurrence with this proposal.

MRN: 12 ASTANA 644

SUBJECT: 2012 ASTANA EMBASSY SCIENCE FELLOWS PROGRAM (KAZAKHSTAN)

KAZAKHSTAN GREEN ECONOMY STRATEGY DEVELOPMENT PROPOSAL

1. (U) Mission Kazakhstan requests a Science Fellow with expertise in climate change or environmental policy experience, with a preference on policy analysis. Kazakhstan's Ministry of Environmental Protection (MEP) has requested support in the development of a Green Economy Strategy that would be the synthesis of a number of related economic and low carbon strategies previously elaborated. Mission would prefer a Fellow that could begin late summer/early fall 2012 in Astana. Post requests the Fellow serve for at least three months, which would necessitate a medical clearance. Russian-language skills are preferred, but not necessary as MEP staff has English language skills, and many are Western educated. A security clearance is not required.

PROPOSAL DESCRIPTION

2. (U) The Republic of Kazakhstan is a middle-income, former Soviet Republic in Central Asia whose economy is largely dependent on the extraction of fossil fuels, including oil and coal. Despite its small population (approximately 15 million), it is among the largest greenhouse gas (GHG) emitters per capita in the world. Kazakhstan has ratified the Kyoto Protocol. Although it is not a member of Annex 1, it has taken on a voluntary commitment to reduce GHGs to 15% below 1990 levels by 2020. This is an aggressive goal that will be difficult to achieve without strong action given the country's broader economic development goals.

3. (U) The government of Kazakhstan is implementing a number of economic development strategies, including a 2010 Concept on the Potential of the Republic of Kazakhstan to Transition to a Low-Carbon Economy by 2050, and passed a number of laws, such as a January GHG emissions trading system (ETS). The MEP, Ministry of Industry and New Technologies, and Ministry of Economic Development and Trade could benefit from advice on how to implement the new laws and regulations. The new Minister of Environmental Protection is seeking to consolidate these strategies and develop a proposal that will gain presidential-level support.

4. (U) The Mission Kazakhstan Science Fellow would provide technical assistance and policy advice to governmental agencies on climate change issues and low emissions development strategies to advance bilateral science and technology cooperation with the government. The Science Fellow would work with the USAID Environment Officer and State Department Science and Technology (ESTH) officer, as well as local officials from the Ministries of Environmental Protection, Industry and New Technologies, and Economic Development and Trade. The ideal Science Fellow would have a strong technical background, experience in climate change or energy policy, preferably policy analysis experience, and experience working in developing countries. Previous experience working in the former Soviet Union and experience in the creation of climate or energy policies on behalf of the U.S. government are both strongly desired.

ADMINISTRATIVE SUPPORT

5. (U) The Embassy Astana Management Section would provide housing and funding for in-country travel (as-needed). In-country logistical support will be considered on an as-needed basis. Office space will be provided by the USAID liaison office in Astana.

RSO CONCURRENCE

6. (U) Embassy Astana is a two-year assignment with a 25 percent hardship differential. RSO has no objection to hosting an Embassy Science Fellow.

MRN: 12 BANGKOK 1762

SUBJECT: EMBASSY SCIENCE FELLOWS PROGRAM 2012: BANGKOK, THAILAND

1) (SBU) Summary: The United States and Thailand have a long history in science collaboration. As Thailand continues to develop and grow as a leading country in Southeast Asia, it faces many challenges in environmental degradation and the depletion of natural resources. The Royal Thai Government (RTG) seeks to balance this growth with environmentally sound practices in order to achieve a more sustainable future. Embassy Bangkok fully supports the Thai Ministry of Natural Resources and Environment's (MoNRE) goals to develop awareness, knowledge and skills for a broad range of stakeholders in order to protect and improve the environment. Embassy Bangkok submits a proposal for a Science Fellow from the Environmental Protection Agency (EPA) to assist MoNRE's Department of Environmental Quality Promotion (DEQP) in capacity building among the Thai people. Post requests a science fellow for 90 days sometime between January-September, 2013 roughly. The science fellow will not require a security clearance.

Proposal

2) (SBU) The Thai Government aims to bring all sectors together, including public and private organizations, non-governmental organizations, educational institutions and local communities to achieve a better environment. In order to do this, the RTG seeks to build capacity of its people in environmentally sustainable practices in order to address key problems in natural resource and environmental management. The Institute of Environmental Training and Technology Transfer (IET), Department of Environmental Quality Promotion (DEQP), Ministry of Natural Resources and Environment aims to provide a broad range of stakeholders with the opportunity to develop awareness, knowledge and skills in order to protect and improve the environment for a sustainable future.

3) (SBU) One of IET's responsibilities includes teaching courses on environmental management for the people of Thailand and neighboring countries, adding even more value to having a science fellow. The science fellow would assist IET in building capacity of the Thai stakeholders in the areas of sustainable development and preparedness for environmental challenges in the region. IET envisages the science fellow will assist with technical advice and support in human and institutional capacity development activities. Main responsibilities would include:

- Providing technical advice and a roadmap for the capacity building on the increasing knowledge of environmental challenges
- Collaborate with related organizations to help establish content for environmental courses
- Support the further development and implementation of the capacity building and training programs, including course evaluation
- Support competency development of IET's staff and internal consultancy on issues related to human resources development

Embassy Support

3) (SBU) Administrative Support: Post is committed to providing housing, office support, a cell phone for official use, and in-country travel arrangements.

4) (SBU) RSO Concurrence and Embassy Clearance: Embassy Bangkok is a three-year assignment with a 10% differential. RSO has no objection to hosting an Embassy Science Fellow for a period not to exceed 90 days.

MRN: 12 BEIJING 1966

**SUBJECT: CYCLE 2012 EMBASSY SCIENCE FELLOWS PROGRAM PROPOSAL
BEIJING, CHINA**

1. (U) SUMMARY: As requested in 12 STATE 42621, Embassy Beijing submits the following three proposals for selection of an Embassy Science Fellow (ESF) to serve in Beijing in the spring 2013 to summer 2013 timeframe. If there is sufficient interest, Embassy Beijing can host up to two ESFs during this time period, provided there is little or no overlap in the terms of the two ESFs. Embassy Beijing's top priority would be to host an ESF who is an expert in **"innovation and standards."** The area of expertise for a possible second ESF is **"disaster preparedness."** A third potential area is **"municipal water resources."** Post appreciates this opportunity to submit these proposals, and believe strongly that ESFs would find working in China challenging and rewarding, with high potential for positive impact. End SUMMARY.
2. (U) Prospective ESFs are encouraged to spend two to three months at Post during a mutually agreed upon timeframe during winter 2012 or spring 2013. Mandarin language skills are preferred but not required. ESFs will receive support and guidance from ESTHOffs and from other relevant agencies or sections and will be supervised by the ESTH Section Deputy. Specific work projects will be finalized based on post priorities and the candidate's experience and expertise.

Innovation and Standards

3. (U) ESTH Beijing's top priority for an Embassy Science Fellow's area of expertise would be in the field of innovation and standards development in China. As China continues to promote a policy of "indigenous innovation," the establishment of policies and procedures to develop open and neutral technology standards that conform with international standards and protect intellectual property rights is crucial for the global economy. Beijing is ground zero for efforts to promote China's development of innovation practices, standards and intellectual property rights that protect U.S. firms' technology and competitiveness.
4. (SBU) Consistent with OES/STC's stated priority of *supporting scientific and technological applications that drive innovation*, Post requests the Department identify an ESF that could support efforts to promote fair and equitable terms to foster innovation, intellectual property rights protection, and market competition. The ESF would follow developments relating to innovation policies being implemented by relevant government ministries, such as the Ministry of Science and Technology (MOST), the Ministry of Industry and Information Technology (MIIT) and the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ).
 - A. Post requests an innovation expert for a mutually agreed upon two to three month period between November 2012 and May 2013.

- B. A security clearance is not required. Nevertheless, the Fellow must undergo a National Agency Check with Local Agency Check (NACLAC) investigation.
- C. Ideally, the Fellow will speak Chinese, have the ability to work independently in the field, and have some background in standards related policies. An ESF would likely find that carrying out substantive work in China without at least a minimal amount of Chinese language skills would be difficult.
- D. ESTH will provide support in reaching out to local agencies and organizations that are relevant to the project.

5. (U) Potential projects include:

- Examining national innovation standardization policy. Work with industry groups to identify standardization methodologies for various products.
- Examine Chinese IPR implementation with international best practices.
- Review efforts by Chinese universities and research institutes to foster capacity building in basic research and development and examine definitions of innovation. Examine how international technology transfer and domestic R&D are converted into Chinese-branded commercial products.
- Assess China's R&D budget to determine its effectiveness in producing indigenous technological capabilities.

Disaster Preparedness

6. (U) The 2008 Sichuan earthquake dramatically raised Chinese awareness of the devastating social impacts of natural disasters, in terms of both lives lost as well as popular resentment to a governmental response that was deemed inadequate. Beijing's national leadership on emergency response sets the standard for regional and local responses. Improved disaster preparedness and management require more advanced technologies for decision-makers to assess natural disasters and to bolster emergency relief actions based on international best practices.
7. (SBU) Consistent with OES/STC's stated priority to *mitigate climate- and weather-related disasters*, Post requests the Department identify an ESF that could identify opportunities for knowledge-sharing and capacity building of China's disaster preparedness system. The ESF would interface with Chinese emergency response organizations and government agencies, including the National Disaster Reduction Center (NDRC), Red Cross Society of China, the China Meteorological Association, the Emergency Management Office, and other emergency responder entities to bolster China's disaster preparedness and management capacity.
- A. Post requests a disaster preparedness expert for a mutually agreed upon two to three month period between November 2012 and May 2013.
 - B. A security clearance is not required. Nevertheless, the Fellow must undergo a National Agency Check and Inquiries (NACI) investigation.
 - C. Ideally, the Fellow will speak Chinese, have the ability to work independently in the field, and have some experience in environmental, land use, and/or transportation

- planning. An ESF would likely find that carrying out substantive work in China without at least a minimal amount of Chinese language skills would be difficult.
- D. ESTH will provide support in reaching out to local agencies and organizations that are relevant to the project.

8. Potential projects include:

- Research China's advance warning systems and related technologies.
- Share best practices in emergency preparedness for mass casualty incidents based on U.S. experiences.
- Enhance tools for the visualization of disasters and disaster responses.
- Develop relationships to establish appropriate safeguards and action plans in the event of a large scale disaster. Improve the utilization of satellite imaging and other geospatial technologies to anticipate the consequences of disasters
- Examine potential opportunities to facilitate U.S. exports of disaster preparedness and disaster relief technology and service providers.

Municipal Water Resources

9. (U) Maintaining the quality of municipal water supplies in the face of largely unregulated waste water disposal is one of the largest challenges facing China's efforts to manage its limited clean water resources. The widespread presence of heavy metals and other heavy metals in Chinese municipal water supplies imposes large social and monetary costs to human health and the environment as well as water purification systems of wastewater for household use and consumption.
10. (SBU) Consistent with OES/STC's stated priority in *providing affordable and equitable access to safe water*, Post requests that the Department identify an ESF to assess threats to China's water supply. Waste water, sewage, animal husbandry and agriculture runoff in China is a rising risk to human health. Municipal government officials are seeking ways to be more effective in monitoring and treating waste water. An ESF could identify research and development as well as export opportunities for U.S. goods and services for waste water management. The ESF would work to further strengthen our relationships with government officials and corporate leaders responsible for managing water resources including the Ministry of Environmental Protection (MEP) and the Ministry of Water Resources (MWR). The science fellow would also work with experts in municipal planning and waste water research at Tsinghua University and Peking University while improving Embassy connections to prominent environmentalist NGOs.
- A. Post requests a municipal water expert for a mutually agreed upon two to three month period between November 2012 and May 2013.
- B. A security clearance is not required. Nevertheless, the Fellow must undergo a National Agency Check with Local Agency Check (NACLAC) investigation.
- C. Ideally, the Fellow will speak Chinese, have the ability to work independently in the field, and have some experience in environmental, land use, and/or transportation

- planning. An ESF would likely find that carrying out substantive work in China without at least a minimal amount of Chinese language skills would be difficult.
- D. ESTH will provide support in reaching out to local agencies and organizations that are relevant to the project.

11. (U) Potential projects include:

- Hydrology research, including movement, distribution and quality of water supplies in China.
- Uncover data from Chinese researchers on geological assessment of underground and/or above ground pollution to clean water resources.
- Analyze China's waste water treatment technologies and recommend improvements.
- Share knowledge regarding internationally recognized criteria and methodologies for the evaluation of water quality.
- Create awareness of the role that urban planning and pollution regulation play in protecting municipal water resources.
- Advocate the utilization of U.S. export products, including goods and services, in the Chinese effort to secure its water resources. Collaborate with experts in Chinese water supply issues to conduct research on ongoing threats to the regional water supply

Administrative Support

12. (U) Subject to final confirmation by Post management, Post will provide housing and office space, and will arrange necessary logistical support for the ESF as described in reftel. Funding for in-country travel will be provided pending future funding availability.

Regional Security Office (RSO) Concurrence

13. (U) Embassy Beijing is a three-year assignment with a 15 percent hardship differential. RSO has cleared this message.

MRN: 12 BUCHAREST 388

**SUBJECT: EMBASSY SCIENCE FELLOWS PROGRAM 2012
(BUCHAREST, ROMANIA)**

1. (U) Subject of Proposals and General Information:

- Topic: Environmentally-Sound Unconventional Gas Development
- Relevant Government Entities: Ministry of Environment and Ministry of Economy (Trade and Business Climate)
- Preferred Timeframe: Three months in the spring of 2013; exact timing will depend on availability of Science Fellow and of housing at post.
- Romanian language skills would be helpful, but not required. Strong public-speaking skills and an ability to clearly explain complex scientific concepts preferred.
- A security clearance is not required.

2. (U) Proposal Description:

President Obama and Secretary Clinton have made more diverse, cleaner energy supplies a top priority in supporting our security and climate change goals. U.S.-Romanian cooperation in shale gas is of strategic and economic importance to both countries, to the Central and Eastern European region, and to the global gas market. Romania has been producing conventional gas for 100 years but with onshore conventional gas plays maturing and depleting, Romania is considering offshore and unconventional gas, including shale, as ways to diversify the country's energy resources. Romania is also actively considering ways to reduce dependence on Russian gas, which currently accounts for 30% of Romania's consumption at fluctuating prices; unconventional gas could play a large role in reducing this dependence. Several private companies, including Chevron, have won concession licenses for areas that include shale gas plays and those companies have made an initial acquisition of seismic data. The next step will be exploratory drilling to determine whether gas is present and extractable in commercially viable amounts.

With no expertise in shale gas production, the Romanian Government is still determining how to approach the question of developing a shale gas policy. This includes questions about whether Romania will decide to introduce new environmental regulations to cover exploration and/or exploitation of unconventional gas resources, in addition to those already in place for conventional gas production. Development of unconventional gas resources could pave the way for Romania to become self-sufficient in natural gas production, and potentially become an exporter. In other words, unconventional gas has the potential to change both Romania's energy market and the markets of the Central European region. U.S. agencies have the experience and expertise Romania needs to develop its own shale gas regulatory structure and Romanian Government officials at the highest levels have personally and repeatedly requested such assistance from the United States. The U.S. experience addressing the environmental and

social challenges associated with shale gas production will also be welcomed by all Romanian stakeholders in the public, private and civil society sectors.

In light of these requests and Romania's intention to develop a national approach on shale gas development, Embassy Bucharest requests a Science Fellow who is expert in environmental impact studies related to unconventional gas development. The Fellow should be familiar with administrative procedures related to the exploration and production of shale gas in the U.S., including environmental regulations and best practices. The Fellow should also have knowledge of methods used to identify key environmental problems, as well as ways to protect ground waters and surface waters.

The Fellow would work with Romanian officials from the Ministry of Environment and the Ministry of Economy's Trade and Business Climate Department, as they draft national and regional regulations for shale gas drilling and production. (Note: In Romania, the Ministry of Economy also has oversight over the energy sector. End Note.) The Fellow would share U.S. experience in land use planning, resource management plans, and the design of environmental impact assessments, as well as how federal and local authorities are involved in these processes in the U.S. During the Fellow's time in Romania, s/he would travel to various shale gas sites to meet with representatives of the regional environmental protection agencies and other local officials, and discuss their concerns about the environmental impacts of unconventional gas exploitation. In addition, the Fellow would report on Romania's progress in developing its shale gas resources so that interested U.S. audiences can keep apprised of the situation. Post envisions the Fellow would participate in public diplomacy efforts, such as giving university lectures on topics in which s/he is an expert, as well as media interviews.

3. (U) Administrative Support:

Post is committed to providing housing and office support, and in-country travel arrangements as applicable. This request has been cleared by the Front Office, the GSO and the RSO.

4. (U) RSO Concurrence:

Embassy Bucharest is a three-year assignment with a 5% hardship differential. The professional benefits that will result from hosting an Embassy Science Fellow in Bucharest, Romania, offset any potential security risks involved. Romania is a low-threat country. The presence of an Embassy Science Fellow for a period not to exceed 90 days does not significantly increase risk to U.S. citizens in country.

MRN: 12 FREETOWN 292

Subject: 2012 Freetown Embassy Science Fellows Program (Sierra Leone)

1. General Information.

Topic: Environmental Protection

Host Institution: Sierra Leone Environmental Protection Agency (EPA)

Time Frame: Request Embassy Science Fellow (ESF) to serve 3 months beginning in January or February 2013.

Additional Skills: The ideal ESF would have expertise in environmental issues related to offshore petroleum exploration as well as organizational skills to assist in growing and maturing the EPA.

Medical Clearance: A medical clearance is required. Medical facilities in Sierra Leone fall critically short of U.S. standards. Persons who have serious health concerns such as heart disease, diabetes, or asthma; or who are taking medications, such as blood thinners, that require laboratory monitoring are discouraged from traveling to Sierra Leone. Because P Falciparum malaria has an extremely high transmission rate throughout the year, malaria chemoprophylaxis is strongly recommended for all travelers even for very short stays. ESF would have access to the Health Unit, but would not qualify for hospitalization coverage or medical evacuation. So, the ESF must have medical insurance which must cover, at a minimum, routine treatment, hospitalization, general medical emergencies, and air medical evacuation.

Security Clearance: Fellows will either have a National Agency Check with Local Agency Check (NACLAC) investigation or a security clearance. In the case of a NACLAC, Embassy Freetown will issue a local badge that permits unescorted access in unclassified facilities which is access comparable to that of Locally Employed Staff (LES).

2. Proposal Description.

Post requests the assistance of an Embassy Science Fellow with expertise in the area of Environmental Protection relating to offshore petroleum exploration. ESF will work with the Sierra Leone Environmental Protection Agency setting policy

and strategy, advising on organizational structure, identifying needs, and providing specific science expertise. There will likely be opportunities for the ESF to work with other Government of Sierra Leone entities as well as research and academic institutions in Sierra Leone. This Fellowship would build on the Embassy Freetown's collaborative work with the EPA over recent years, complement the U.S. government Energy Governance Capacity Initiative (EGCI) efforts relative to Sierra Leone, and directly addresses the 2012 ESF program priority of managing oceans, environment, and natural resources

The devastation of the 1991-2002 civil war and extreme poverty continue to fundamentally impact almost all aspects of Sierra Leone society. Sierra Leone is in a period of transition in which it is moving beyond the moniker of a "post-conflict nation" to a nation of increasing self-sufficiency. Institutional structures, both government and private, continue to develop, but remain immature. The Sierra Leone Environmental Protection Agency (EPA) is a case in point. The EPA is newly-formed and is challenged to gather the resources and develop the expertise needed to meet its mandate. In particular, the EPA will seemingly soon have to manage the complex environmental issues that accompany offshore petroleum exploration.

Sierra Leone has great wealth in its natural resources. The petroleum, mining, agriculture, and fishing industries are of great importance for the nation's development. In 2009, a consortium led by U.S. oil company Anadarko revealed a potential for oil off the coast of Sierra Leone. Exploration by Anadarko continues to assess the full commercial potential of oil deposits off the coast. The International Monetary Fund has forecasted Sierra Leone real GDP to grow 5.1 percent in 2011 and 51.4 percent in 2012. This astonishing increase is due to long-awaited revenues from large scale iron ore exports. The impact of petroleum revenues would have an even greater impact on the country's immature economy. Through EGCI, the U.S. government is helping the GoSL develop the capacity to manage potential petroleum discovery in areas such as environmental impact assessments, revenue management, contract negotiations, and the development of science talent. On a more limited scale, the Embassy Green Council has assisted the EPA as well by coordinating local Green events and networking with scientists in the U.S. government to give advice and assistance.

3. Administrative and Logistical Support.

Post will provide housing, office space, and in-country transportation for the ESF. Post understands that the home agency will fund the candidate's salary, M&IE,

appropriate pre-departure training, and international air travel to and from Freetown. Freetown is a two year assignment, with a 30 percent hardship differential. Freetown presents an exceptionally difficult environment for management and quality of life issues due to the country's extremely poor infrastructure.

4. Security. RSO, Embassy Freetown concurs with this proposal.

MRN: 12 HANOI 468

**SUBJECT: EMBASSY SCIENCE FELLOWS PROGRAM PROPOSAL
(HANOI, VIETNAM)**

1. (U) In response to ref A, Mission Vietnam submits the following proposals for two Embassy Science Fellows (ESFs) during the fall 2012 – summer 2013 cycle.

Proposal 1 – Control of Rhino Horn Imports

Subject of Proposal and General Information

2. (U) *Topic.* The Mission requests an ESF to work with the Convention on International Trade in Endangered Species Management Authority (CITES-MA) to help design and pilot test a system to monitor and control the import of hunting trophies, including rhino horns.

3. (U) *Name of relevant ministry, university, or host institution.* CITES-MA is a division of the Forest Protection Department of the Ministry of Agriculture and Rural Development (MARD). The ESF will work closely with CITES-MA to support its mission of implementing CITES in Vietnam.

4. (U) *Preferred timeframe and length of fellowship.* The preferred timeframe for the fellowship is during the summer 2013 transfer season, when accommodations in the Embassy housing pool are most likely to be available. The fellowship will last 8 weeks, not including about 4 weeks of work in the U.S. (see para 10). Accordingly, medical clearance is not necessary.

5. (U) *Additional skills.* The ESF should be a specialist in international wildlife trade policy and enforcement. The ideal home agency is the U.S. Fish and Wildlife Service. Vietnamese language skills are desirable but not required.

6. (U) *Security clearance.* Security clearance is not necessary.

Proposal Description

7. (U) Vietnam has been implicated in skyrocketing rhino poaching in Africa, where the number of rhinos killed by poachers in South Africa alone has ballooned

from 13 in 2007 to 448 in 2011(ref B). The belief purportedly held by some Vietnamese that rhino horn can cure cancer has helped drive its prices to \$25,000 per pound on the black market.

8. (U) Each year, South Africa issues rhino hunting licenses but has seen a recent increase in the number of “pseudo-hunters” who pose as trophy hunters, but whose real interest is in selling the horn (ref C). Many suspected pseudo-hunters are Vietnamese nationals. Officially, no more than 60 horns are legally imported into Vietnam as trophies bagged from South African game farms each year, but international wildlife experts have estimated the actual number of trophy horns taken by Vietnamese nationals from South Africa each year exceeds 100.

9. (U) To help Vietnam stop the potential abuse of hunting permits, the Mission requests an ESF to work with CITES-MA to help design and pilot test a system to monitor and control the import of hunting trophies, including rhino horns.

10. (U) The 12-week project will consist of:

a. Project design

i. Literature review: two weeks, in the U.S.

ii. Fact finding: two weeks, in Vietnam

iii. Project design: two weeks, in Vietnam

b. Pilot test: four weeks, in Vietnam

c. Analysis and report preparation: two weeks, in the U.S.

11. (U) This project advances the MSRP priority of helping Vietnam transform into an effective global and regional security partner by supporting its ability to implement and enforce laws in an effective, transparent, and accountable manner. This project meets this year’s ESF priority area of managing oceans, environmental, and natural resources.

Proposal 2 – Fisheries and Marine Resource Management

Subject of Proposal and General Information

12. (U) *Topic.* The Mission requests an ESF to work with the MARD Fisheries Directorate to study Vietnam’s marine fisheries and potential economic, environmental, and regional policy implications of moving commercial-scale fishing away from the coast. The study will assess South China Sea fisheries stocks and catches and make policy recommendations on integrated coastal and marine

planning, maritime regulatory systems, and sustainable fisheries management in a context of regional tensions related to South China Sea marine resources. The ESF will also study investment strategies for expanding Vietnam's fishing industry.

13. (U) *Name of relevant ministry, university, or host institution.* The ESF will work closely with the MARD Fisheries Directorate.

14. (U) *Preferred timeframe and length of fellowship.* The preferred timeframe for the fellowship is during the summer 2013 transfer season, when accommodations in the Embassy housing pool are most likely to be available. The fellowship will last 4 weeks, not including about 4 weeks of work in the U.S. (see para 20). Accordingly, medical clearance is not necessary.

15. (U) *Additional skills.* The ESF should be an expert in sustainable marine fisheries management and related economic, environmental, and regional policy issues. Potential home agencies include the National Oceanic and Atmospheric Administration and the U.S. Fish and Wildlife Service. Vietnamese language skills are desirable but not required.

16. (U) *Security clearance.* Security clearance is not necessary.

Proposal Description

17. (U) Four million Vietnamese currently work in a Vietnamese fishing industry with practically unregulated multi-species access to near-shore fisheries. MARD would like to study the potential costs and benefits of scaling back near-shore fishing in favor of developing a modern fishing industry focused on deeper waters in the South China Sea. This change would affect the livelihoods of Vietnamese fishers, require substantial new investment, and pose challenges in terms of coastal and marine planning, maritime regulation, and marine environmental protection. Moreover, little information is available concerning South China Sea fisheries stocks and catches to support sustainable marine fisheries management. Finally, international cooperation related to South China Sea marine resource development and management is currently limited.

18. (U) The Mission requests an ESF to work with the MARD Fisheries Directorate to study Vietnam's marine fisheries and potential economic, environmental, and regional policy implications of moving commercial-scale fishing away from the coast.

19. (U) The 8-week project will consist of:
- a. Literature review: two weeks, in the U.S.
 - b. Field work: four weeks, in Vietnam
 - c. Analysis and report preparation: two weeks, in the U.S.
20. (U) This project will advance key MSRP priorities including (i) sustainable economic development through environmental protection and effective management of water and other natural resources and (ii) improving economic governance. This project meets this year's ESF priority area of managing oceans, environmental, and natural resources.

Administrative Support

21. (U) The Mission may be able to provide accommodations from its housing pool in Hanoi. Due to limited housing and cost constraints, the Mission requests that candidates be flexible regarding the timeframe of the fellowship and specific housing arrangements.
22. (U) The Mission will arrange for office space and administrative support and fund any in-country travel costs.

RSO Concurrence

23. (U) RSO concurs; Vietnam is a two year assignment with a 20 percent hardship differential.

MRN: 12 ISLAMABAD 1288

Subject: 2012 ISLAMABAD EMBASSY SCIENCE FELLOWS PROGRAM (PAKISTAN)

1. (U) Sensitive but unclassified. Not for public Internet.

SUBJECT OF PROPOSAL AND GENERAL INFORMATION

2. (SBU) Embassy Islamabad proposes to host a climate change expert and/or glaciologist to provide training activities, professional-level discussions, and consultations with Pakistani provincial and federal water resource managers, universities and research institutes, and civil society groups active in the water sector. The Ministry of Water and Power (MWP), Water and Power Development Authority (WAPDA), and provincial water management departments will participate. Embassy Islamabad's preferred fellowship length is one month with a flexible time frame of July-November 2012. Ideal fellows will have teaching, research, and applied technical experience. A security clearance is not required for the project.

PROPOSAL DESCRIPTION

3. (SBU) The United States and Pakistan have been actively engaged in a Strategic Dialogue Water Working Group (WWG) to support reform and improvements to Pakistan's water sector. Over the past several months, government of Pakistan (GOP) and civil society water experts have asked repeatedly for support and training programs to better understand climate change and glacial melt. The Embassy Islamabad Science Fellow would be an expert in climate change and/or glaciology and would review current data on climate change and glacial melt (provided by Post) and develop scenarios and management responses prior to arrival at Post. While in Pakistan, the Fellow would provide training sessions, professional-level discussions, and consultations with government water resource managers, university and research centers, and civil society organizations active in the water sector. The Science Fellow would travel to Islamabad, Azad Jammu and Kashmir, Sindh, Punjab, and Gilgit-Baltistan to engage both federal and provincial water resource experts based on Regional Security Office approval. The U.S. Agency for International Development (USAID) Regional Environmental Officer will also participate when possible.

ADMINISTRATIVE SUPPORT

4. (SBU) USAID will provide housing, office support, telephone/computer/Internet access, logistical support, and in-country travel arrangements. The Economic Section will also provide logistical support. The Environment, Science, Technology, and Health Officer, a consulate Economic Officer, and/or a USAID officer will travel with the Fellow during the project.

RSO CONCURRENCE

5. (SBU) Mission Pakistan is a one-year unaccompanied assignment. Embassy Islamabad is a 25% hardship differential and 35% danger pay post. RSO has no objection to hosting an Embassy Science

Fellow for a period not to exceed 29 days. The Fellow should become familiar with the Mission Travel Policy and Procedures and must comply with all RSO policies.

MRN: 12 JAKARTA 874

SUBJECT: 2012 EMBASSY SCIENCE FELLOWS PROGRAM PROPOSAL (Jakarta, Indonesia)

1. (SBU) Summary: Embassy Jakarta requests an Embassy Science Fellow with expertise related to developing “virtual” or “digital” library. This project would involve working with the Ministry of Research and Technology, the Directorate General of Higher Education Ministry of Education and Culture, other Ministries as appropriate, and research institutions in basic science and technology, museums, hospitals and medical research facilities, agricultural research centers, marine and fisheries research centers, and research and education facilities of other sciences. The timeframe for this project is flexible; a date between September 2012 and May 2013 is preferred. The ideal Science Fellow would have a strong technical background, especially in database development or system networking, experience in science policy, and experience in assisting other countries develop scientific capacity. No security clearance is required for this project. End Summary.

Proposal Description

2. (SBU) Specific Work Project: The Embassy Jakarta Science Fellow would provide technical assistance to advance U.S. government science and technology cooperation with the Government of Indonesia. The science fellow would work with the State science and technology officer, USAID science and technology officer, Indonesia’s Ministry for Research and Technology, and Indonesia’s Ministry of Education to develop and implement a plan for a Virtual Library. The Fellow would facilitate linkages with other stakeholders in the larger Indonesian science enterprise, including private universities, the private sector (e.g., scientific publishers, software and hardware companies, R&D-intensive companies), U.S. Library of Congress, and the development assistance community (e.g., USAID, AusAID, WorldBank). The online “Virtual Library” would have at least two components: 1) establish access to international Science, Technology, and Innovation journals for Indonesian research institutions, and 2) digitize (and possibly electronically translate) abstracts of papers published in Indonesia.

3. (SBU) Science Fellow Expertise: The ideal Science Fellow would have a strong technical background in database design, system networking and/or cyber-infrastructure; and experience in science policy and/or in assisting other countries develop scientific capacity. Experience working with multiple government and non-government entities, particularly in a developing country context, or in performing similar projects on behalf of the U.S. government would be desirable.

4. (SBU) Background: At the conclusion of his one-year term, President Obama’s Science Envoy Dr. Bruce Alberts identified the lack of a digital libraries system as an impediment to strengthening science capacity in Indonesia. Indonesia has a vibrant community of students and researchers with demonstrated excellence in science and technology research at the national and international level, but the results of this research is usually published in limited physical print runs housed at the host institution. The majority of research publications in Indonesia are written in Indonesian or other local languages and are not available online either to Indonesians at other institutions or to international scholars. A limited number of scientists and students have access to top international journals. A Virtual Library would give Indonesians access research results and potential collaborators from throughout Indonesia and around the world, and could foster greater international collaboration in Indonesian research projects.

Administrative Support

5. (SBU) U.S. Embassy Jakarta will provide housing, office support, telephone/computer/internet access and in-country travel arrangements, if appropriate. Indonesia's Ministry for Research and Technology has committed to providing office space, telephone/computer/internet access. Please note that the Ministry for Research and Technology is providing this level of support for Embassy Jakarta's current science fellow. Because of sparse housing availability during the summer transfer season, the preferred timetable for a Science Fellow is a 90-day period between September 2012 and May 2013.

RSO Concurrence

6. (SBU) Embassy Jakarta is a three-year assignment with a 25 percent hardship differential. RSO has no objection to hosting an Embassy Science Fellow for a period not to exceed 90 days.

MRN: 12 KOLKATA 130

Subject: Embassy Science Fellows Program 2012 (Kolkata, India)

1. Summary: The U.S. Consulate in Kolkata is pleased to submit two proposals for the 2012 Science Fellows Program. Post believes strongly that ESFs would find working in Kolkata consular district stimulating and rewarding, with the opportunity to make significant impact in furthering US-India scientific cooperation. Our proposals are:

- a. Making Connections: This Fellow would develop a science cooperation and outreach strategy to leverage ongoing research ties between U.S. and Kolkata institutions, identify new and promising areas of collaborations, and recommend innovative outreach programs to promote greater engagement with the student and scientific community in West Bengal;
- b. Climate and Agriculture: This Fellow would work with NGOs to develop long term climate adaptive agriculture strategies for climate vulnerable regions like the Sundarbans area in southern tip of West Bengal and Darjeeling hills, eastern Himalayas in the northern part of the state.

General information

2. -- Preferred time frame and length of fellowship: Post would like to host the Fellows for a period of three months each, preferably without any overlap in timing. For (a), any time would be suitable except for the months of December-January and May-June when academic institutions are closed.

-- Language skills: No special language skills are required. English is commonly spoken in India.

-- Security clearance is not required

Proposal Description: Post Science Cooperation and Outreach Strategy

3. Background: At present, Post is aware of ongoing scientific research collaboration between US National Laboratories (e.g. Oak Ridge, Brookhaven,

Argonne National Laboratories, National Renewable Energy Laboratory, National Science Foundation) and scientific institutions in Bengal (e.g. Saha Institute of Nuclear Physics, Variable Energy Cyclotron Center, Indian Institute of Technology, Kharagpur), but lacks the resources to fully leverage these exchanges. The proposed fellow would help the U.S. Government understand the range and depth of ongoing scientific collaboration, identify promising areas of further cooperation, and advise how to engage with students and the scientific community to promote new innovative partnerships and programs.

Work Description

4. The Science Fellow is expected to:

-- Visit Kolkata's premier research organizations, university departments and gain understanding of the organization's scientific capabilities and information on ongoing collaborations with U.S. institutions.

-- Identify new, promising areas of scientific collaborations. Make preliminary suggestions regarding potential collaborating organizations and contacts in the U.S. for the identified research areas and advise on future course of action.

-- Participate in outreach programs in schools and universities to promote U.S.-India partnerships in science and innovation. Advise on innovative science outreach programs and partnerships.

-- Compile the information above into a 'Science Cooperation and Outreach Strategy' for post to enhance scientific cooperation between US and West Bengal.

An ideal candidate would have academic qualifications in any scientific discipline, possibly with work experience in the National Science Foundation, have a good knowledge of U.S. scientific research institutions and their capabilities and experience of developing strategic research partnerships between U.S. and overseas research organizations.

Proposal Description: Long Term Strategy for Climate Adaptive Agriculture

5. Background: There has been a significant rise in extreme weather events in recent years affecting farm level productivity and livelihood security of the rural

poor in India. This problem is particularly acute in the climate hot spots of the Sundarbans delta in the southern tip of West Bengal and the Darjeeling hills in the eastern Himalayas, in the northern part of the state. Cyclones have become frequent and more devastating in the Sundarbans, soil salinity levels have increased due to frequent inundation of sea water during storms, which has badly affected rice production in this largely agrarian population of more than 4 million islanders. NGOs like WWF are experimenting with salt tolerant paddy cultivation as an adaptation strategy to secure local livelihoods. In the Darjeeling hills, weather is getting warmer, water sources are drying up, onset of summer and monsoon has advanced during last 10 years and there is less snow on mountains than before. Local perceptions of the impact of climate change on biodiversity include early budburst and flowering, new agricultural pests and weeds.

Work Description

6. NGOs like WWF working on climate adaptation programs in the region have information on local agriculture practices, meteorological data and forecasts of future climate scenarios. Given this information, they need expertise in formulating long term strategies for climate adaptive agriculture in regions like the Sundarbans and Darjeeling – incorporating information like which crops will grow best in the changing climate, what low cost adaptive agriculture techniques can be used to address current vulnerability and future climate risks. Ideal candidate would be an agriculture scientist with experience in designing climate adaptive agriculture strategies preferably in the South Asia region. The Science Fellow will work closely with the NGO and visit agriculture project sites.

Administrative Support

7. Consulate Kolkata will provide housing, office support, telephone / computer / internet access, and in-country travel arrangements and lodging outside of Kolkata as funds allow. The availability of housing will depend on timing of the Fellowship. Though no medical clearance is required, the Science Fellow should take appropriate prophylactic measures according to Department recommendations and guidelines for India.

RSO Concurrence

8. RSO has no objection to hosting each Embassy Science Fellow for a period of 90 days. Consulate General Kolkata is a two year assignment with 25 percent hardship differential.

MRN: 12 NDJAMENA 558

SUBJECT: EMBASSY SCIENCE FELLOWS PROGRAM 2012 N'DJAMENA, CHAD

1. (U) General: Embassy N'Djamena proposes to host an Embassy Science Fellow (ESF) to conduct a comprehensive assessment of current research efforts and opportunities for US engagement towards finding science-based solutions to the disappearance of Lake Chad.
 - A. Host institution: The ESF will collaborate with professors and doctoral students at the University of Ndjama (UNDJ) Science Facility, but will be physically based at the U.S. Embassy.
 - B. Time frame: The preferred length of time for the fellowship is two months. Post can be flexible on exact dates and length of stay. From July to September, in-country travel is likely to be impeded by the rainy season.
 - C. Medical clearance: A medical clearance is not necessary, as the fellowship will be less than 59 days. Chad is a least developed country and has very limited health services. Potential ESFs with significant medical conditions would most likely not be able to access needed support. The ESF will have access to the Foreign Service Health Practitioner (FSHP) and other health services available to Embassy non-local staff. The FSHP highly recommends that the ESF obtain ISOS medical evacuation insurance.
 - D. Necessary skills:
 - I. Background: A wide range of technical expertise could be appropriate, including hydrology, chemistry, soils science, agriculture, geology, and ecology.
 - II. Language: The ESF should have at least intermediate level French language skills. UNDJ contacts may be familiar with technical English in their fields but not in other contexts. General conversation and comprehension will be greatly enhanced if the ESF has French ability.
 - E. Security clearance: A security clearance that will allow for unescorted, non-CAA embassy access is required; however, this clearance may be less than a secret clearance (e.g. SF 85 "Questionnaire for Public Trust Positions").
2. (U) Proposal description: The rapid disappearance of Lake Chad is an environmental issue of global significance. A core recommendation emerging from a USG inter-agency report, "Opportunities to Facilitate Sustainable Water Management in the Lake Chad Basin", is to support "small-scale engagements focused on promoting scientific and academic exchanges aimed at finding evidence-based solutions to sustainable water resource management in the Lake Chad Basin." Post envisions that the ESF will collaborate with UNDJ researchers and administrators as well as government of Chad, donors, and Lake Chad Basin Commission (LCBC) representatives to identify current and future research priorities and funding sources to support

science based solutions for the disappearance of Lake Chad. The ESF will present their analysis to Post as well as to the LCBC in a professional report. The report should identify the range of current and prospective research and assistance efforts, in order to help target U.S. public and private sector involvement to contributing to a solution to the continued shrinkage of Lake Chad. The report will also be presented to the Lake Chad inter-agency group, comprising State, USAID, USGS, and US Forest Service representatives, to contribute to the ongoing work to implement their recommendations.

Specific tasks include:

- A. Identify the current status of various research projects, including priorities, funding levels and anticipated outcomes, as well as key gaps in research and critical analytical information on the disappearance of Lake Chad. This would include engagement with the full range of host-country government agencies and regional organizations, including the LCBC, donors, and UNDJ.
 - B. Identify areas for potential U.S. public or private sector involvement in Lake Chad research in support of USG policies.
 - C. Prepare a comprehensive summary report of the above to be presented to: (a) The Lake Chad Basin Commission (LCBC), and (b) USG Lake Chad working group to provide an update on implementation of recommendations, and to explore potential funding sources.
3. (U) Management clearance: US Embassy N'Djamena commits to provide the ESF with housing, office support, in-country travel arrangements, and other logistical support as it does with any USG TDY assigned to Chad. The embassy will provide space, office materials, and computer access as necessary. The ESF will be assigned TDY housing in the embassy housing pool, which may involve sharing a vacant house with another TDY or embassy staff. Post's commitment is contingent on the ESF receiving some form of public trust security clearance, falling under Chief of Mission authority, and agreeing to respect all security directives, including rules and regulations about in-country travel and embassy access.
 4. (U) Security clearance: Mission N'Djamena is a two year assignment with 30 percent hardship differential and 15 percent danger pay. RSO clearance granted provided ESF resides in embassy housing pool and ESF is vetted for public trust (SF 85). ESF will fall under Chief of Mission authority and is required to follow all established rules and regulations.

MRN: 12 REYKJAVIK 232

SUBJECT: REYKJAVIK, ICELAND, 2012 EMBASSY SCIENCE FELLOW PROPOSAL

1. (U) Post requests an Embassy Science Fellow to enhance the bilateral science research ties with Iceland in the key Mission Strategic Plan priority of the Arctic. Iceland has similarly prioritized Arctic issues as a key element of its foreign policy. The presence of an Embassy Science fellow would assist the Embassy with encouraging and facilitating increased cooperation in this important area.

Host Institution: The Fellow will work primarily with the Stefansson Arctic Institute (Contact: Dr. Jon Haukur Ingimundarson, Senior Scientist, Stefansson Arctic Institute & Associate Professor, University of Akureyri; Tel: +354 460-8982 (work); +354 862 0477 (GSM); Fax: +354 460-8989; E-mail: jhi@svs.is or jhi@unak.is).

Time Frame: Preferably, the fellowship would take place in September and October for approximately eight weeks. No medical clearance is requested, and a fellow staying less than 90 days does not need a visa. A security clearance is not required and no foreign language skills are necessary.

Skills Required: Knowledge of USG priorities related to the Arctic social sciences and familiarity with Icelandic research opportunities. Post will seek the assistance of Anna Kerttula de Echave, Program Director of the Arctic Social Sciences in the Office of Polar Programs, for this position. Ms. Kerttula de Echave's familiarity with Iceland's research projects and USG priorities in this field would enable us to make the maximum impact of the Fellow's limited time period. Similarly, her professional commitment to the Arctic Social Sciences would ensure the establishment of long-term partnerships.

Security Clearance: None.

2. (U) Project Description: The Stefansson Arctic Institute (SAI) was established in 1998 and operates under the auspices of the Icelandic Ministry for the Environment. It is located in Akureyri in Northern Iceland and bears the name of explorer and anthropologist Vilhjálmur Stefánsson (1879-1962). The staff at the Stefansson Arctic Institute includes scientists with broad interdisciplinary research background and experience. The role of SAI includes a multi-disciplinary research cooperative forum and promote sustainable development in northern areas, facilitate and co-ordinate international Arctic research in Iceland. SAI is committed to provide facilities for scholars who pursue research relevant to Institute's agenda.

We request the assignment of an Embassy Science Fellow to Iceland for approximately eight weeks to advance Mission objectives and to work with the SAI on the following initiatives:

- As part of the Embassy representation, provide information about Arctic science and U.S. funding agencies to the Parliamentarians of the Arctic, who will hold their meeting Sept. 5-7th this year in Akureyri.
- Participate in the Arctic Councils Sustainable Development Working Group (SDWG) in Akureyri, hosted by the Ministry of Foreign Affairs. Ms. Kerttula de Echave has worked extensively with the Arctic Council in the past and her office supports research projects and workshops that have been developed by the SDWG.
- Assist with updating the Arctic Human Development Report, a preeminent Arctic social science research project. Ms. Kerttula de Echave brings important experience to this project as possibly over 50% of the researchers involved in this report are supported by her Arctic Social Sciences Program.
- Develop U.S.-Iceland-Greenland connections and collaborations, possibly through the Cooperative Committee on Arctic Affairs "Iceland and Greenland Science Days" in Nuuk, Greenland in late September where scientists will be talking about current and future research.
- Arrange, in collaboration with other NSF programs, an international workshop to promote interdisciplinary research in the Lake Myvatn area. Myvatn is a very rich ecological and cultural system where many scientists have been working for decades. This workshop would bring together these researchers to discuss the potential for more collaboration internationally and across disciplines in order to gain a more complete understanding of coupled human and natural systems under conditions of change.
- Give lectures about U.S. scientific developments, particularly concerning the Arctic.
- Public outreach in support of the Embassy's goals of highlighting U.S. research collaborations in Iceland.

3. (U) Administrative Support: The Fellow will work closely with SAI on the project. Thus, SAI has pledged to provide housing and work space for the Science Fellow. Access to transportation support from SAI is also likely. Post is willing to provide transportation, work space and logistical support where possible. The Fellow will work closely with the representatives from the Economic and Commercial Section responsible for the Energy and ESTH portfolios.

4. (U) RSO Concurrence: RSO has cleared on this proposal. Reykjavik is a two year assignment with a 10 percent hardship differential. RSO has no objection to the mission hosting a fellow for a period not to exceed 59 days.

MRN: 12 TASHKENT 770

SUBJECT: TASHKENT, UZBEKISTAN EMBASSY SCIENCE FELLOWS PROPOSAL 2012

1. (U) SUMMARY. After actively consulting with Government of Uzbekistan (GOU) counterparts to determine their needs, Post is submitting a proposal for an Embassy Science Fellow in 2012-13(reffel A). Post requests an expert in national innovation policy and technology commercialization to assist the host government in drafting a national program on innovation policy. The Science Fellow also would develop and carry out a series of training programs for key GOU decision makers responsible for national science policy on appropriate strategies and programs needed to advance national innovation policy and technology commercialization. Since signing the bilateral Science & Technology Agreement in 2010, Uzbekistan has been eager to cooperate with the U.S. in science related fields and often requests U.S. scientists come to Uzbekistan to deliver lectures and present information. END SUMMARY.

2. (U) Capacity Building in Innovation Policy and Technology Commercialization in Uzbekistan

3. (U) Post requests the temporary posting of an Embassy Science Fellow from an interested participating agency. The Fellow will provide technology commercialization training to GOU officials and scientists as well as assess the commercial potential of Uzbekistan's current scientific facilities and projects.

A -- GENERAL INFORMATION

TOPIC: Innovation Policy and Technology Commercialization in Uzbekistan

HOST: Committee for Coordination of Science and Technology Development, Cabinet of Ministers of the Republic of Uzbekistan

TIME FRAME: Flexible. Prefer two to three months in either the summer or fall of 2012. Medical clearance required.

ADDITIONAL SKILLS: Although not required, Russian and/or Uzbek language ability will enhance the Fellow's productivity. Post will assist with translating and interpreting services as needed.

SECURITY CLEARANCE: Not required

B -- PROPOSAL DESCRIPTION

Several high-level GOU officials, including the President, have stated that innovation is key to Uzbekistan's economic future. Innovation is essential to efforts to modernize the economy, produce competitive goods, and facilitate sustainable and efficient use of natural resources. As part of this effort, experts would like to better utilize Uzbekistan's scientific and research sector to contribute to the creation of innovative technologies. Uzbekistan is home to many skilled

scientists whose research and inventions have been underutilized due to a lack of knowledge of how to market their work, as well as the domestic legal foundations to support innovation through the protection of intellectual property rights (IPR). The weakest link, however, is not the lack of skills or technology, but the absence of expertise and trained professionals in technology commercialization. Uzbekistan is in need of such experts to assist industry, universities, and scientific and research centers to realize the commercial potential of their technologies and inventions through effective marketing strategies and licensing support.

The GOU has requested Post assistance in creating a new generation of experts in technology commercialization in order to guide scientific organizations through the technology commercialization process. This could include teaching local scientists how technology transfer agreements work and advising them on how to create partnerships with foreign investors, compiling a detailed listing of areas of expertise and research interests for leading Uzbek scientists which can be made available to foreign investors, and developing partnerships between local scientific institutions and international research centers to share commercialization policies and techniques. The commercialization of Uzbek developed technologies would increase economic opportunities, provide additional funding for Uzbek scientific research, and facilitate the development of an entrepreneurial spirit among scientists.

The Fellow will advise the host government on national innovation policy and deliver a series of trainings on technology commercialization to local scientists and GOU officials. These efforts would complement collaboration already established under the U.S.-Uzbekistan Agreement on Science and Technology Cooperation.

The major tasks in this project are:

- Deliver a series of trainings on technology commercialization to GOU officials and scientists;
- Conduct site visits to scientific, research, engineering, and technological facilities to identify S&T capabilities as well as needs and gaps. Develop a report analyzing opportunities for future U.S. engagement with the GOU;
- Advise the Committee for Coordination of Science and Technology Development on national innovation policy as well as the importance of creating a strong domestic IPR system to protect locally developed technologies; and
- Act as a resource for Embassy Tashkent, the Department's Regional Environmental, Science, Technology and Health (ESTH) Hub for Central Asia, SCA, and OES on scientific and technical issues between the U.S. and Uzbekistan.

C -- ADMINISTRATIVE SUPPORT

Post commits to provide housing, office space and support, in-country travel arrangements, and other logistical support as required.

D—RSO Concurrence

Tashkent is a two year assignment with 30 percent hardship differential. RSO has no objection to hosting an Embassy Science Fellow for a period not to exceed 90 days.

MRN: 12 TBILISI 1142

SUBJECT: Tbilisi, Georgia: Proposal for Embassy Science Fellow Program 2012

1. (U) Per reftel, Embassy Tbilisi submits the following proposal for an Embassy Science Fellow:

Topic: Environmental Protection and Climate Policy

Host Institutions: USAID, with possible rotations in the Ministry of Environmental Protection, and the Office of the Prime Minister

Time Frame: Up to 90 days in the second half of 2012 (July to December) is preferred

Medical Clearance: Required

Skills: Knowledge of Russian or Georgian languages is beneficial but not required. The ESF must have demonstrated experience in at least one of the following fields: forestry and natural resource management policy; environmental regulations and compliance analysis; climate and economic modeling; or land management.

Security Clearance: Not required

Project

2. (U) The fellow is expected to contribute to the work of Embassy Tbilisi and the USAID Mission under the supervision of USAID's Office of Energy and Environment in the following areas: forestry and natural resource management policy, climate change policy and development, the USG Enhancing Capacity for Low Emission Development Strategy (EC-LEDS), and emissions inventories and planning. The Government of Georgia (GOG) places a high priority on economic development and tourism. To ensure the sustainability of these investments, the GOG must improve environmental protection and natural resources management. Forestry, biodiversity, and scenic landscapes have been threatened by poor policy development, lax environmental law enforcement, and pollution from a variety of sources.

3. (U) The Ministry of Environment Protection (MOEP) had approached USAID for technical assistance regarding the development of environmental reports to which the ESF may contribute. The Fellow is expected to be involved in components of the EC-LEDS partnership to help the GOG build the capacity to understand and develop low emission policies and strategies. This may include aspects of technical modeling of economic and environmental variables, development of emissions reporting and monitoring systems, and assistance in the production of USG and GOG reports required under the United Nations Framework Charter on Climate Change (UNFCCC).

4. (U) The ESF will utilize his environmental expertise to support Embassy and USAID offices in responding to developments in environmental policies and legislation related to forestry, freshwater and marine issues, air quality, climate change and adaptation, and land-use change. The ESF will be expected to interact with high-level officials, represent the Mission to counterparts, and solicit information from a wide range of internal and external stakeholders on issues related to environmental and climate policy.

Administrative Support

5. (U) Management has approved this cable. Embassy Tbilisi will provide office support and in-country travel arrangements to the Fellow. The Fellow does not need a security clearance and will not have office space in the CAA.

RSO approval

6. (U) RSO has approved this cable. Embassy Tbilisi is a two-year assignment with a 25 percent hardship differential.