

U.S.-JAPANESE-RUSSIAN COOPERATION FOR ENVIRONMENTAL PROTECTION IN THE RUSSIAN FAR EAST

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Introduction

The end of the Cold War has provided new opportunities to find cooperative solutions for the environmental needs of the Russian Far East (RFE). The RFE is a vast territory about two-thirds the size of the United States. It is rich with natural resources and only sparsely populated. There are many reasons to think about the promotion of environmental cooperation in the RFE. From an ecological standpoint, the RFE is one of the last remaining, relatively unspoiled frontiers in the world. It is home to the largest population of brown bears in the world and has large populations of northern fur seal, sea otters, sea lions, salmon, and birds. The boreal forests of the RFE, known as the Taiga, make up one of the largest remaining forests in the world. The cold climate of the RFE makes the ecological system particularly fragile. As the RFE opens to trade with China, Korea, Japan, and the rest of the world, pressures on its ecological systems will grow. The RFE will be targeted for development because of its rich natural resources, which include timber, fisheries, coal, and oil. As this development progresses, it will be critical that sufficient attention is given to environmental considerations.

The RFE has a declining and poor population. Environmental management capacities in the region are still limited. The level of air and water pollution in large cities of the RFE, e.g., Vladivostok and Ussurisk, exceeds health standards. Ninety percent of all sewage in the largest city of the RFE, Vladivostok, goes into the Amursiky, Ussuriskiy, and Golden Horn bays without treatment. Toxic industrial waste is accumulating with almost no attention to environmental safety regulations (<http://bisnis.doc.gov/bisnis/country/9905rfe.htm>). Cooperation is necessary to improve scientific understanding of the ecological systems of the region. Further assessments of the extent of habitat and biodiversity loss and areas of particular vulnerability are needed. International cooperation can aid this process. There are also few environmental networks within the region or between the region and its neighbors. US and Japanese cooperation can promote the development of the environmental NGO community in the RFE and assist them with information exchange and resources. Some communities of the RFE still have no electricity and huge distances among communities makes this a difficult task. Promoting environmental NGO activities may be particularly important for the region given the limited priority environmental considerations appear to have in Moscow. The dissolution of the Environment Ministry by President Vladimir Putin raises serious questions about what place environmental considerations will be given in Russia's economic development.

Already there has been considerable environmental degradation of the region. During Soviet times, collectivization led to the loss of the sustainable communities of the indigenous communities of the region and urbanization. The Soviet economy focused on heavy industry and the RFE supplied that economy with many resources, particularly

timber and mine resources. There has been already much clear cutting in the Taiga that has caused damage to soil and waterways.

The collapse of Soviet economy has been particularly hard on the RFE. Declining economic conditions in the region have placed new pressures on the forest, mine, and marine resources of the RFE as the population of the region attempts to eek out a living. Poaching of the Siberian tiger and the Amur leopard have brought these species to a point near extinction. The RFE also suffers from the environmental destruction that has been caused by its use as a dumping ground by the Russian military. The most notorious such case was the use of the Sea of Japan as a dumping ground for low level liquid radioactive waste by the Russian navy (Newell and Wilson, 1996).

From an economic standpoint, there are also reasons to consider promotion of environmental protection in the region. Introducing sustainable development practices to the region could help its population gain economically. Currently, too much of the wealth of the region is exported out of that region. From a long term perspective, it is also important to protect the natural resources of the RFE so that those resources do not disappear as occurred in the industrialization and modernization of Europe and large parts of the United States.

There are also security reasons for promoting environmental protection in the RFE. The military power of the Russian military in the RFE is declining and Moscow is increasingly emphasizing diplomacy in its relations with countries of the Northeast Asian region. In 1996, Russia became a full participant in the Association of Southeast Asian Nations (ASEAN) Regional Forum and in 1998 of the Asian Pacific Economic Cooperation (APEC) forum. Russia is also a member of the Council for Security and Cooperation in the Asia-Pacific, Western Pacific Naval Symposium, Northeast Asia Cooperation Dialogue, and Northeast Asia Economic Forum (Sergey Sevastyanov, November 1999, <http://cns.miis.edu/cres.sevast.htm>). Collaborative problem solving can help to bring together countries in Northeast Asia that have historically viewed each other with great suspicion. Still today, relations between Russia and Japan are marred by the failure of these two states to come to agreement on the ownership of the Northern Territories (the Kuril Islands). North Korea which borders on the RFE remains a largely isolated state in the international system. Addressing the transboundary environmental concerns among China, Russia, and North Korea is necessary to protect endangered species, but could also help promote greater understanding in the region. From Japan's perspective, environmental pollution (particularly marine pollution) emanating from Russia is of concern. The dumping of radioactive wastes into the Sea of Japan strained relations between these two states. Cooperative efforts to find environmentally safer ways of dealing with Russia's nuclear waste problem can bring mutual benefits. While the solutions may not always be easy to find, problem solving efforts can help to improve inter-state understanding about policy priorities and needs and to promote compromise. The environment is one area where the United States, Japan, and Russia can work together for the collective good in order to promote better relations among them (Schreurs and Pirages, 1998).

Japanese Environmental Activities in the Russian Far East

Japan has a particularly big stake in environmental conditions because of its interests in the resources of the RFE, still tense security relations with the RFE,

transborder pollution problems, and the issue of the Northern Territories. The RFE and Japan are natural trading partners because of complementarities in their economic structures and resource bases. In fact, since the 1970s, Japan has been the largest trading partner of the RFE. In 1968, the Japanese and Russians came to their first major investment and trade agreement. The KS Sangyo Project established in 1968 was an agreement calling for the export of Russian logs in exchange for Japanese technology related to the forestry industry. Since this agreement was signed other agreements have been signed to export RFE logs and coal and to develop oil and gas fields in the Sea of Okhotsk, off the coast of Northeast Sakhalin (Newell and Wilson, 1996: 21-22; Newell, Taiga-News No. 25, 1998, <http://www.snf.se/TRN/TaigaNews/News25/BDFarEast.html>). There are now thousands of miles of oil and gas pipelines that are planned to connect Sakhalin to Japan and Yakutia to Mongolia, China, and South Korea. Marine resources are also catching the eye of Japanese and American canneries (Taiga-News, No 25, August 1998, <http://www.snf.se/TRN/TaigaNews/News25/FarEast.html>). The internationalization of Japan's environmental community since the late 1980s has led to the growth in interest of the Japanese Environment Agency and environmental groups in the environmental conditions of the Asian region. Most of this focus has been on China, Korea, and Southeast Asia. A handful of groups, however, have started to pay close attention to the RFE and Japanese investment patterns in the region. Several of these initiatives will be introduced here.

The Biodiversity Hotspots of the RFE Project

Some of the most extensive work on the environmental conditions of the Russian Far East has been done by Friends of the Earth, Japan (FOE-J). It is interesting to note that a key player in these efforts of FOE-J to promote environmental preservation in the RFE has been an American, Josh Newell. He has been working together with Eiichiro Naguchi on this project. FOE-J started a project known as the Hotspot Project in 1995 (<http://www.foejapan.org/en/siberia/index.html>). The Hotspot Project worked with local scientists, academics, and environmental groups to identify and protect environmental hotspots in the RFE and Siberia. They have hosted conferences and held roundtables held in ten regions of the RFE. They are also involved in the dissemination of information, fundraising, public advocacy, and efforts to reform foreign business investment and trade. Their work has been supported by the W. Alton Jones Foundation, the Japan Fund for the Global Environment, Pro-Natura Foundation, and the AEON Foundation. FOE-J now works together with IUCN-the World Conservation Union on this project. The Hotspot Project members meet with government officials regarding resource development project investors, and in particular, the role of the Export-Import Bank of Japan (JEXIM).

The first conference they organized was in 1995 in Vladivostok. A second Biodiversity Hotspots Conference was held in Yakutsk and was co-hosted by FOE-J, IUCN-the World Conservation Union, and the Ministry of Nature Protection of the Republic of Sakha. Out of these conferences has grown a consensus on areas of particular ecological vulnerability throughout the RFE. To qualify as a hotspot, an area had to have existing and projected threats from industrial development, presence of rare or endangered species, a level of ecosystem fragility, importance for traditional land-use by indigenous peoples, or poorly studied areas that could meet the previous criteria. One

example of an area designated as a hotspot by these groups is the Borisovskoye Plateau, located 100 km west of Vladivostok. This area was identified as a hotspot because it is home to the endangered Far Eastern leopard. The project recommends giving the plateau protected status and combining it with the existing federal nature reserve (*zapovednik*) and the Barsoviy preserve (*Zakaznik*) to give the leopard enough territory to have a chance to survive (Newell and Wilson, 1996: 60). Another example is Peter the Great Bay in Primorskiy Kray. The bay is threatened by tanker and ship pollution, poaching of marine resources, and the development of the islands for dachas. The project has recommended a marine protected area, probably a natural park in order to limit commercial development and protect the environment. As a region close to Vladivostok, the project notes that the region is an important tourist attraction for the inhabitants of this the largest city in the RFE. (Newell and Wilson, 1960: 61). In total the project identified 44 hotspots that it recommended be protected in the different regions of the RFE (Table 1).

Table I: Biological Hotspots in the Russian Far East by Territory

Primorskiy Kray

- Borisovskoye Plateau
- Bikin and Samarga Watersheds
- Lake Khanka Basin
- Peter the Great Bay
- The Tumen River Delta
- Extension of Sikhote-Alin' Reserve

Khabarovsk Kray

- Sikhote-Alin Mountains
- The Shantar Archipelago
- Badzhal'skiy Mountain Range
- Lake Everon

Amur Oblast

- Southern Zeyq-Bureinskaya Plain
- Arkharinskaya Lowlands and parts of Little Khingan Ridge
- Mukhinka
- Between the Nora and Selemdzha Rivers
- Zeyskiy Reserve and bordering territories

Republic of Yakutia

- Bol'shoye Tokko Lake
- Between the Lena and Amga Rivers
- Between the Yana and Indigirka Rivers
- Middle reaches of Uchur River
- Vilui Region

Chita Oblast

- Koarskiy Ridge
- Headwaters of the Olyokma River
- Headwaters of the Chikoy River
- Region around Dauriski Reserve

Magadan Oblast

- Magadan Reserve
- Northeastern part of Gizhiginskaya Estuary
- Tauskaya Estuary, Shel'tinga Bay, Luzhina Bay, and Onatsevicha and Khmitevskiy Peninsulas
- Okhotskiy and Erineyskaya Estuaries
- Middle and lower reaches of Korkodon River Basin

Chukotka Autonomous Okrug

- Lake El'gygytgyn and neighboring ecosystems
- Middle and lower reaches of Chegetun' River
- Kolyuchinskaya Estuary and the area between the Amguema and Vankarem Rivers
- Bol'shoy Diomid and Maliy Diomid Islands
- Navarinskiy Shelf and neighboring territories
- Porvidenskaya Tundra and Providenskiye Fjords
- Billings Cape and adjoining territories

Kamchatka Oblast

- "Conifer Island"
- Proposed Bystrinskiy National Park
- Proposed Parapol'skiy Dol' Zapovednik

Sakhalin Oblast

- Northeastern Wetlands
- Southeastern Coastal Forests
- Schmidt Peninsula
- Nabil'skiy Ridge
- Kril'on Peninsula and Moneron Island

(Source: Newell and Wilson, 1996: 3).

Maritime Province of the Russian Far East and Northern Japan Surrounding the Sea of Japan

The Virtual Foundation of Japan and Friends of the Earth-Japan (FOE-J) are working together on a long-term project started in December 1990 to assist the local community in developing sustainable local businesses in Agzu in the Samarga river basin, which lies in the Maritime Province of the RFE across from the southern fork of Sakhalin. Samarga tributaries eventually pour into the Sea of Japan. Through use of the internet, the idea of the project is to link communities in Samarga with communities in Japan to promote the exchange of ideas about how to promote sustainable development in the RFE. A unique element of this project is the idea of involving the Japanese consumer in the project. One project that is being considered is a cherry salmon hatchery in Agzu that employs Japanese salmon hatchery technology and experience and would export salmon from the hatchery to the Japanese market. Another element would include a

hatchery-to-hatchery exchange that would help to repopulate the rivers of Niigata, which flow into the Sea of Japan with cherry salmon (<http://www.sirius.com/~meganf/rfe.html>).

Japanese Cooperation on Nuclear Submarine Decommissioning in the RFE

In June 1999 Japan's Foreign Minister, Masahiko Koumura proposed to Russian Foreign Minister Igor Ivanov Japanese assistance in decommissioning nuclear submarines in the Russian Far East. Japan has provided nuclear safety assistance to Russia since 1993 when it pledged \$100 million. Part of this sum was used for the construction of a mobile liquid waste processing facility at the Zvezda naval yard, which is near Vladivostok (Igor Kudrik, June 4, 1999, <http://www.bellona.no/imaker?id=7738&sub=1>). The decommissioning of nuclear-powered submarines in the RFE is a critical issue since the submarines of the Pacific Fleet are rusting. Japan more recently allocated several millions of dollars for the construction of a low-level liquid nuclear waste treatment barge at Bolshoi Kamen. (Editor's note: See James Clay Moltz, "Japanese Assistance to the Russian Nuclear Complex" in the present Proceedings.)

UIS. Environmental Activities in the RFE

Geographically, the United States also has a stake in conditions in the RFE because of the proximity of Alaska to the region. The United States also has security interests in the region both because of Alaska and its security agreements with Japan and South Korea. Promoting sustainable development in the RFE has not been a high priority for U.S. groups, but is an area that deserves greater attention. Several of the U.S. initiatives for environmental protection in the region are discussed below.

Initiative for Social Action and Renewal in Eurasia (ISAR-Far East)

ISAR started work in the RFE in 1993 and opened an office there in late 1994. ISAR provides a clearinghouse for citizen initiatives in the RFE. Supported by USAID funds, ISAR-RFE started a small grants program for grassroots environmental projects in the region in 1995. The idea behind this was to empower local NGOs, which are often geographically isolated and financially extremely limited. A real emphasis of the program is to work with local educators and activists in educating the larger community about social and environmental matters. In its first two years, the project funded 214 projects. Again with USAID funding, the organization has started an environmental education publishing program. The group publishes environmental materials, developed by local authors, and distributes them free of charge to regional schools, education NGOs, and children's libraries. The organization also produces a journal, *Listya v Ladonyakh* (Leaves in the Palms), to foster a network among environmental educators in the RFE. This publication has been a real success for the organization (Telephone Discussion with Alice Hengesbach of the Washington, D.C. office of ISAR, June 1, 2000). Another publication of ISAR-RFE is *Zapiski c Dalnovo Vostoka* (Notes From the Russian Far East). This bulletin contains information on resources, upcoming events, fellowship competitions, and news about regional NGOs. They have also created an NGO database on all registered NGOs in the territories of the RFE. In 1998, the organization obtained funding from USAID's Office of Democratic Initiatives and Human Resources to launch a three-year program to foster NGOs in the region. One of

these programs is the “Tomorrow Starts Today” Small Grants Program. This program awards grants to NGOs working on one of several issues: women, social services, health and environment, independent media and information services, citizens’ rights, and youth. In awarding grants, an expert board of local NGO leaders assesses the quality of applications. (<http://www.isar.org/isar/rfe.html>).

Pacific Environment and Resources Center

The California-based PERC has campaigned on a number of environmental issues affecting the RFE. For example, they have sought to bring attention to illegal gold mining activities in a strictly protected nature preserve of the Sakhalin region (<http://www.flora.org/flora.perc/885>). David Gordon of PERC is a leading expert on the problem of deforestation in the Taiga. In collaboration with USAID, PERC has also given some support to the Russian Far Eastern Association for the Use of Non-Timber Forest Products. This association was founded in 1995 to work to unify enterprises that make use of non-forest timber products in order to promote the sustainable development of forest communities and support the traditional activities of indigenous peoples (<http://www.friends-partners.org/~ccsi/nisorgs/russeast/notimber.htm>).

Monterey Institute of International Studies

The Center for East Asian Studies of the Monterey Institute has hosted a number of conferences that bring together scholars from the United States, the RFE, Japan, South Korea, and China and prepared a number of research papers related to the RFE, Siberia, and cooperation in Northeast Asia. These conferences have focused on the development of the region, enhancing cooperation in the region, environmental protection in the region, and the role of NGOs. (<http://ceas.miis.edu>). (Editor’s note: One of the products of the multinational collaboration is Tsuneo Akaha, ed., Politics and Economics in the Russian Far East: Changing Ties with Asia-Pacific, London: Routledge, 1997.)

Nautilus Institute

The Nautilus Institute completed its three-year project on Energy, Security, and Environment in Northeast Asia (ESENA) Project in 1999. The main goal of the project was to develop U.S.-Japanese policy initiatives directed toward addressing transboundary acid rain issues, energy-related marine issues, and the financing of advanced clean coal technology in China. The primary focus of the project was not on the RFE, but it did address issues of cooperation in the Northeast Asian region. Funded by the U.S.-Japan Foundation and the Japan Foundation’s Center for Global Partnership, the project was a joint initiative by the Nautilus Institute and the Tokyo-based Center for Global Communications (<http://www.nautilus.org/papers/energy/ESENAfinalreport.html>).

The Siberian Tiger Project

The Siberian Tiger Project was launched in 1992 after two years of planning by the Hornocker Wildlife Institute (HWI) and Russian partners. The goals of this project are to improve understanding of the ecology of the Siberian tigers in the RFE and to use this information to improve the chances for the Siberian tigers’ survival. This has involved the capture and placement of radio telemetry devices on individual tigers to track their activities. The project has been funded by the Save the Tiger Fund at the

National Fish and Wildlife Foundation and is based out of Moscow, Idaho. (http://www.5tigers.org/ConservationOrganizations?HWI/hwi_rep1.htm).

The Tiger Information Center

A related activity was the work of Bruce Marcot, a wildlife ecologist for the USDA Forest Service, Pacific Northwest Research Station, Portland OR. Marcot has emphasized the need to establish habitat corridors that cut across administrative and national boundaries for the survival of the tigers. In addition, he cites the need for enforcement of CITES regulations prohibiting the illegal international trafficking in tigers and tiger parts, captive propagation with integrated plans for reintroduction into the wild, environmental education, and other points (<http://www.5tigers.org/Russia.Marcot/marcot2.htm>).

World Wildlife Fund

WWF has launched various projects to protect tigers in the RFE through support of antipoaching patrols, investigation of medicinal markets in Asia and the United States, and the development of regional, national, and international management plans to protect tigers throughout their range (<http://www.worldwildlife.org>).

European Groups Addressing Environmental Issues in the RFE

There is also some interest in the RFE that has been expressed by European groups although it is limited and appears focused on forestry and nuclear issues.

Taiga Rescue Network

A European initiative to preserve the Taiga has led to the publication Taiga-News, a quarterly newsletter that deals with the state of forests and people of boreal forests, on trade and consumption of forest products, and on the activities both of multinational logging corporations and NGOs. The newsletter has reported on such issues as the lease of forest land that is home to many rare species of wildlife, including the Siberian tiger, to a Malaysian logging firm (Taiga News, No. 24, April 1998, http://www.snf.se/TRN/TaigaNews/New_22s23/index.html) and the Hotspots project described above.

Bellona (www.bellona.no)

This Norwegian-based group reports on nuclear issues in Russia, including accidents and incidents related to nuclear vessels in the Russian Pacific Fleet. Issues of the newsletter the group produces address nuclear developments in the RFE. One report, for example, focused on a storage barge for submarine spent fuel that caught fire at its base in Primorye in the RFE (<http://www.bellona.no/imaker?id=13896&sub=1>) and another looked at the case of leakage of liquid radioactive waste from a naval tanker near Vladivostok (<http://www.bellona.no/imaker?id=7747&sub=1>).

Pollution Control Markets in the RFE: U.S. and Japanese Investment in the RFE (Cooperation or Competition?)

Pollution control is a major need of the region. Air and water pollution and toxic contamination are serious problems. Radioactive waste from the Russian Pacific Fleet

threatens the region. The arsenal of the Russian Pacific Fleet is concentrated in Vladivostok and Russkiy Island. Bolshoi Kamen, a nuclear submarine construction facility, also has high levels of radioactive products for which safety measures are necessary.

According to an Industry Sector Analysis Report authored by Sergei Vyatkin for the U.S. and Foreign Commercial Service and U.S. Department of State, although there are serious environmental problems, the market for pollution control in the RFE remains small. The pollution control market relies heavily on outside funding. There are virtually no local pollution control or environmental protection firms in the RFE. There are three major environmental clean-up projects currently underway in Primorskiy Kray: Peter the Great Bay, the Tumen River region, and Boshoi Kamen. A U.S. firm, AZAZ Corporation, is working with Primorskiy Kray on clean-up of Golden Horn bay through the removal of scrap metal, dredging and recovering metals and oils. The Tumen River Delta region is a site of a potential \$30 billion port development project involving China, North Korea, and Russia and is sponsored by the United Nations Development Program. Because large-scale development could have adverse environmental implications, the World Bank's Global Environmental Facility (GEF) is considering a US \$5.2 million fund for environmental protection focusing on water pollution and biodiversity in the region south of Vladivostok. Bolshoi Kamen's radioactive waste problems are being addressed by a multi-million dollar Japanese government-funded project to develop a barge to be based in Bolshoi Kamen to process low level radio-active waste. The Babcock and Wilcox Division of McDermott, working with Russian partners Amur Shipbuilding Yard and Zvezda, is completing the building of the barge.

The Sakhalin island oil and gas development projects and a possible large water clean-up project in Vladivostok could stimulate the market. U.S. firms are the front-runners in the field. They are getting competition from Japanese companies as well. (Business Information Service for the Newly Independent States (BISNIS) <http://bisnis.doc.gov/bisnis/country/9905rfe2.htm>)).

The Tumen River Development Project

The Tumen River Development project is a plan conceived in the early 1990s to develop the Tumen River Delta, which stretches from the Chinese town of Yanji to the Sea of Japan and from Chngjin, North Korea to Vladivostok in Russia. It was envisioned as a \$30 billion project to develop a trade and transport complex that would include as many as eleven harbors, three international airports, and an inland port rail hub. Behind the proposal was the idea that through cooperation, Russia, China, North Korea, and Japan could develop this region and gain greater access to the rich natural resources of Siberia and the RFE. When the project idea was introduced it stimulated both considerable interest and skepticism. Political differences among the states of the region have dampened enthusiasm for the project. China initiated the idea of joint development of the region in 1989 to support development of its northeast region. China also wants access to a port in this region. Russia has not expressed much enthusiasm for the project although it has some interest in finding a means to finance and build the infrastructure necessary to really market the RFE's resources. For North Korea development would help the country to break its economic isolation, but the country also is concerned about loss of sovereignty. For Japan and South Korea the project could help their own regional

economies develop and provide these countries greater access to the resources of the RFE and Siberia. Yet, funding is a big concern. There are also many environmental concerns should the project move forward because of the rich and fragile marine environment of the region and the implications of this region's development for the exploitation of the natural resources of other areas of the RFE (Michael Lavallee, <http://www.american.edu/projects/mandala/TED/tumen.htm>).

U.S.-Japanese Cooperation for Environmental Project in the RFE

In theory the idea of U.S.-Japanese cooperation in environmental protection in the RFE is a good one. U.S. and Japanese NGOs, corporations, and government should be able to work together to promote sustainable development in the RFE. The reality of the situation, however, is that there is still little direct cooperation between the United States and Japan for environmental preservation in the RFE. The U.S.-Japan Common Agenda, which was set up in July 1993 as a framework for cooperation between the governments of the United States and Japan to find cooperative solutions to global-scale problems, for example, has no activities in the RFE. According to Richard Forrest who is in charge of the U.S.-Japan Common Agenda, there are currently few environmental programs of any kind being conducted under the program.

One example of the kind of project where cooperation is possible is the work done by the International Kuril Island Project. This is an international collaboration of American, Russian, and Japanese scientists to survey the ecology of the Kuril Archipelago. The groups involved are the University of Washington (Fish Collection, Burke Museum, and Herbarium), the Russian Academy of Sciences, Far East Branch, and Hokkaido University. The project was the idea of Theodore Pietsch of the University of Washington who went to Japan on a fellowship from the Japanese Society for the Promotion of Science (JSPS). The project is funded by the National Science Foundation with additional support provided by the Academy of Sciences and the JSPS (<http://artedi.fish.washington.edu/ikip>).

The 1990s have been a decade of promoting knowledge of the environmental situation of the RFE, enhancing monitoring, and supporting local NGO initiatives. A challenge for the next decade will be to find means to enhance cooperation for the protection of this still largely pristine region. This will require that more consideration be given to the possibilities afforded by cooperation. If cooperation is thought of in the broadest sense, then environmental cooperation initiatives will not only benefit the environment, they will also help to build the human networks that can help to promote understanding among nations of the region.

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