

The aim of the Community Conservation Resilience Initiative (CCRI) is to contribute to the implementation of the Convention on Biological Diversity's 2011-2020 Strategic Plan and Aichi Targets, by providing policy advice on effective and appropriate forms of support for community conservation.

The project is documenting and reviewing the findings of bottom up, participatory assessments of up to 60 communities in at least 20 different countries, assessing the resilience of community conservation initiatives and the support that should be provided to strengthen these initiatives. The results of the assessments will be widely disseminated and fed into the deliberations of the Convention on Biological Diversity and related international policy processes through an active outreach and advocacy campaign. The project will run until April 2019. A CCRI methodology [1] has been developed, which is a simple guiding framework that can be adapted to the reality of a community.

A number of CCRI projects are already under way, including with communities in Chile, Colombia, Ethiopia, Iran, Malaysia, Panama, Paraguay, Russia, Samoa, Solomon Islands, South Africa and Uganda. The case studies are inspiring, and the pilot projects have already taught us a great deal about the best ways to design, develop and implement CCRI projects. This report describes preliminary observations from communities in ten of these countries. The communities involved are:

- The Guna people from Guna Yala in Panama
- Communities in the kebeles of Dinsho-02, Mio and Abakera, in Dinsho District, in the Bale Mountains area of Ethiopia
- The Santa Bárbara-Quilaco-Alto Bio-Bío, Tralcao-Mapu and Chanlelfu communities in southern Chile
- The Udege people, from the Sikhote-Alin mountain range in the South Russian Far East
- The villages of Toamua, Saina and Vaiusu in Samoa
- Communities in the Mariepskop area and Houtbosloop Valley in Mpumalanga province, South Africa
- The San Miguel community in Minga Porâ, and the Maracaná community, both in the East of Paraguay; and La Esperanza, an Enhlet indigenous community in the lower Chaco region
- Communities in the villages of Bukaleba, Kalangala and Butimba villages in eastern, central and south-western Uganda respectively
- Communities in Sulufou and Fera Subua in northeast Malaita in the Solomon Islands
- The Abolhassani Indigenous Nomadic Tribal Confederacy, the Taklé Tribe of the Shahsevan Indigenous Nomadic Tribal Confederacy, and the Farrokhvand Tribe of Bakhtiari Indigenous Tribal Confederacy, in Iran.

"Remembering the pristine conditions of the mangroves and the abundance of ecosystem services and products has fired up the village elders to lead in the baseline data collection survey."

# Factors Undermining Community Conservation Resilience

Local communities and indigenous peoples are highly motivated to protect biodiversity and habitats

The preliminary results of the Community Conservation Resilience Initiative assessment show that indigenous peoples and local communities are rooted in their traditional territories and landscapes, with an immense wealth of knowledge about local biodiversity and other natural resources, and key geophysical factors including local weather patterns and seasonal changes. This knowledge stems from their reliance on their immediate surroundings to provide for a wide range of physical, cultural and spiritual needs.

For example, Udege communities in Russia are traditionally dependent on wildlife, fish, wood and non-timber forest products, and are highly skilled in hunting and fishing. In Samoa, people are dependent upon coastal mangrove forests and the rich inshore fisheries associated with them for their livelihoods.

In the Guna Yala indigenous territory in Panama, the island-living Guna people depend upon nearby mainland forests and mangroves for a variety of foods, medicine and house-building materials, as well as marine resources. The Gunas, who manage their territories autonomously, protect their forests through a system of sacred areas, generally confining traditional rotating agriculture or 'Nainu' to lowland areas. The Solomon Islands also have numerous traditions that conserve biodiversity. These include preserving small streams and surrounding trees to conserve habitat and ensure water for drinking, and the use of customs, taboos and seasonal prohibitions governing access to fishing grounds, reefs and inland sites, which dictate when resources can be harvested sustainably.

Even for communities primarily engaged in shifting agriculture or agropastoralism, forests are still critical and culturally relevant, and many people go to great lengths to protect them. For instance, in Uganda, the Bukabela community conserves significant cultural sites, graveyards and sacred trees, and the Butimba communities have partnered with others to restore regional forests and waterways, and improve farming practices.

However, increasing tensions and internal and external threats are reducing communities' capacity to conserve biodiversity

In particular, increasing demand for land for other purposes, including for farming, industrial forestry and extractive industries, creates increasing tension within and between communities, and between communities and the state.

For example, in Ethiopia local communities in the Bale Mountains steward their natural resources through a system of Sacred Natural Sites (SNS) governed by custodians and elders. These are cultural places, where people

### 🖐 Women in Abolhassani ICCA in Iran

Generally, there is strong cooperation between women and men in terms of governance. The women participate in livestock rearing and herding and other everyday affairs of the ICCA. [2] In cases of drought, when men have to migrate to cities such as Semnan and Shahrood to look for seasonal jobs (another coping strategy), Abolhassani women take full responsibility for management of the everyday affairs of the ICCA such as herding livestock, caring for agricultural plots, dairy production, caring for children and so on, including activities emanating from the Abolhassani initiative, 'Coping with the Drought Cycle'. "After the assessment, which showed the loss of Sacred Natural Sites in the area, the community was pained to see what they have lost, and now we have to consider how to conserve and ensure the sustainability of the remaining sites for the future. The assessment reminds us of the legacy of the past twelve generations, and now we are starting to revive the conservation activities that they practised. The assessment was a wake-up call, and each of us saw what we had lost."

Adam Haji-jarso, Dinsho-02 Kebele, Ethiopia

gather to help one another, to resolve conflicts, to worship, and to pray for rains in times of drought. They are typically located on hills or knolls, and include springs, streams or wetlands and most support rich indigenous forests and act as refuges for wildlife. However, spiralling demand for land for farming is creating tensions between land owners. The land allocation system allows these sites to be allocated for farming, and some community members have begun to undermine and marginalise custodians. Land shortages have also pushed some religious faiths to begin to use the sites as burial grounds. Mapping showed that the number of Sacred Natural Sites had fallen from 72 half a century ago to just 18 now.

A number of other key factors undermining community conservation resilience were identified in the CCRI assessments. These include the pervasive impacts of climate change, especially sea level rise and the destruction of mangroves in low-lying island states. Problems associated with invasive alien plants that are spread naturally by wind, water and birds, and problems associated with bush encroachment and soil erosion were also highlighted. In Iran tribes described a situation in which wildlife is declining and pastures are being degraded, because of the loss of two-humped camels and the over-utilisation of available pastures.

#### Uncertain land tenure and land and resource grabbing are key factors undermining community conservation resilience

Conflicts between formal and customary land rights are often at the heart of the battle to protect local biodiversity, ecosystems and natural resources. This is clearly evident in Uganda, for instance. Some of the lands are classified as community land but the communities have no actual title to or control over it. Communities living on public land can suddenly find they are no longer able to live there, and the natural resources they once depended upon may be destroyed.

Land grabbing and subsequent resistance by communities of 'landless' peasants is also common in Latin America. The CCRI showed that communities engaged in such resistance, such as the San Miguel community in Minga Porâ, Paraguay, are working to restore habitats and biodiversity when they move to new but degraded territories.

Resource grabbing is also highly problematic. For instance the Udege people in Russia explained that an absence of recognised land rights has led to the overexploitation of wildlife and fish resources by recreational hunters and poachers, and commercial fishing fleets over-exploiting salmon stocks at sea, which has in turn led to a serious decline in salmon resources in indigenous rivers. Ironically, government authorities often react by limiting hunting and fishing opportunities for Udege people, treating them as poachers, which triggers frequent conflicts between indigenous communities and government inspectors.

"We have lived in Bukaleba for centuries. It is the only home we know and will ever know. But despite this historical connection, our land rights have never been recognized. Our land is classified as public land and the government has leased out to a private investor to establish a forest plantation. Our cultural sites, graveyards and sacred trees are gone and gone forever!"

Mohamad Ndikulwange, village elder, Bukaleba

Industrial development, industrial agriculture and forestry, and the re-orientation of economies to export natural resources and attract foreign investment, are major impediments to community conservation resilience

This was explicitly mentioned by participants in many communities including in Chile, Paraguay, Russia, Samoa, South Africa and Uganda. For example, deforestation affecting the territories and local lands of the Santa Bárbara-Quilaco-Alto Bio-Bío, Tralcao-Mapu and Chanlelfu communities in Southern Chile has been caused by the imposition of export-oriented extractive industries, including mining, agroindustry and forestry. CCRI participants report that they are also affected by the installation of large hydropower projects to provide energy for mining, and pollution from the pulp and paper industry.

For the communities in the villages of Bukaleba, Kalangala and Butimba villages in eastern, central and southwestern Uganda, major threats include oil exploration and oil palm plantations. Similarly in South Africa vast industrial timber plantations of alien eucalyptus and pine species have been established, placing a serious strain on water quality and quantity. In Samoa, mangrove forests are threatened by the expansion of business and residential areas, land reclamation and increased flooding. Wastewater and solid wastes, especially plastic bags, also lead to mangrove seedlings being smothered. Pollution and a lack of waste disposal

services were also reported as significant challenges by communities in Paraguay and South Africa.

#### Communities' capacity to produce their own food is being hindered, undermining their resilience

The combination of dwindling access to land and resources and incursions by large industrial companies is also impeding communities' ability to produce food for themselves or to sell, and this is likely to have particularly harsh impacts on women who are key players in food production and food sovereignty. In Eastern Paraguay the communities made the link between the agribusiness model and the fact that small farms are disappearing. They are particularly concerned about their healthy crops and animals being affected by neighbours spraying toxic chemicals.

## **Paraguayan communities on some of the challenges they face:**

"As we no longer have forests our environment has gone crazy, it's tremendous drought or rain, rain, rain."

"It's affecting production, losing nature means everything is getting sick and polluted."

"Big producers are destroyers; it's small producers and the rest of us that pay the price."

"We try to produce healthy foods but our neighbours pollute what we're growing by spraying 'mata todo' [a local name for glyphosate]."

"The agribusiness model is the main threat to conservation and to little farmers, that are disappearing."

"The most difficult thing is keeping young people here, as there's no guarantee of work."

### ...and on some of their strengths:

"We are united and organized, that's how we are able to resist. If we help each other we can solve the situation."

"We can demonstrate that we can get back the land, and nature, but I don't think they are interested; for example, we planted trees along the edge of our territory but the Brazilian soybean producers came and destroyed everything ..."

"The law requires 50m of forest to be protected but we leave 100m."

"We have deep cultural roots."

#### Significant socioeconomic changes and the influence of 'western' lifestyles are creating further challenges for communities

Of particular concern is the hollowing out or ageing of communities as young people leave their communities for education or to seek work. Participants in Chile, Paraguay and Russia raised concerns about the migration of young people to the city. This was also a primary concern amongst the Gunas in Panama, who added that young people returning are often disinclined to live according to the Guna traditional way, and that there is less emphasis on parents passing traditional knowledge on to their children (for example, Guna women traditionally passed on information to their children about useful species but this is less common now). The tribes in Iran had told of the increasing consumption of fast foods instead of traditional food, and the fact that young people are less interested in learning about indigenous skills and knowledge. In general, this factor was identified as being very disruptive in the application of traditional knowledge to ecosystem management, production methods and subsistence activities. People in both the Solomon Islands and Ethiopia also pointed out that the influence of 'western lifestyles' is undermining respect for community governance systems.

Communities in the Solomons observed that the growing population and an increasing cost of living are driving people to over-harvest marine and mangrove resources. In the heavily populated Mariepskop area of South Africa residents have no option except using wood for cooking, leading to deforestation. Numerous water-related crises were also identified by CCRI participants, especially in relation to the impacts of climate change and industrial tree monocultures. People in the Santa Bárbara-Quilaco-Alto Bio-Bío, Tralcao-Mapu and Chanlelfu communities in southern Chile listed water shortages, water pollution, changing river flows and the risk of flooding. Paraguayan participants from Minga Porâ and Maracaná similarly mentioned drought, flooding and water pollution caused by soy monocultures. Participants in Mpumalanga, South Africa, warned of declining water quality and silting up in local rivers, with certain fish species becoming locally extinct. Tribes in Iran described communities that are vulnerable to prolonged and increasingly intense droughts, soil erosion and flooding.

The impacts of rising sea levels was also identified as a major threat to communities' resilience, especially by island communities in the Guna Yala comarca in Panama, in the villages of Toamua, Saina and Vaiusu in Samoa, and in Sulufou and Fera Subua in the Solomon Islands. In particular high tides and strong wave activities damage and uproot young mangrove trees, and sea level rise is encroaching on the land and villages. Participants from the communities in the Solomon Islands observed that if they resettled on the mainland this would benefit women especially, since they would have significantly increased access to land for cultivation and fresh water.



In particular, communities can find it almost impossible to continue or further develop conservation activities if they are not involved in relevant decisionmaking processes, as observed in the CCRI in the Santa Bárbara-Quilaco-Alto Bio-Bío, Tralcao-Mapu and Chanlelfu communities in Southern Chile. Ugandan participants pointed out that highly centralised decision-making is susceptible to corruption and compromise, excludes women from decision-making and leaves communities unable to fully pursue and defend their rights.

Paraguayan participants also observed that their resilience is impeded by a virtual absence of the government at the local level, along with a lack of drinking water, health posts, roads and schools. The assessments in Mpumalanga in South Africa reported the same concerns about a lack of basic municipal services, such as waste removal, basic road maintenance and the provision of water.

In Iran, national policies continue to undermine nomadism, refusing to acknowledge its importance as an important and specialised adaptation to local environment, its ecological role or its proven capacity to provide livelihoods. For example, in South Azerbaijan, the Taklé Tribe's wintering grounds were taken over by the government and the private sector a few decades ago. This increased grazing pressure on the summering grounds resulting in greater soil erosion, floods and the destruction of the habitat of the red spotted trout (*Salmo trutta*  *caspius*) in the Ali Dervish River. The decrease in red spotted trout which is a major prey of the brown bear, has caused the latter to leave its natural habitat. The tribe has been restoring the habitat of the trout and hope to reverse the cycle of damage. In general the tribes described a situation in which there is continued denial of communal access, control and ownership over ancestral territories including vitally important migratory routes.

In addition the indigenous knowledge and customary management practices of the community are not taken into account while designing systems of assessment of carrying capacity used for grazing licenses. Iranian government and development agencies have insufficient expertise in terms of understanding non-equilibrium ecosystems (that is, in areas where rainfall is erratic) or rangeland management.

The CCRI in the Primorsky region in Far East Russia also highlighted differences between what happens in theory and in practice. Russian law formally recognises the existence of indigenous territories and grants special hunting and fishing rights for their traditional population. But, similar to countries like Paraguay, there is a serious discrepancy between formal rights, law enforcement and management practices, leading to deep conflicts around the rights for indigenous communities.

# Preliminary Conclusions and Recommendations

The Community Conservation Resilience Initiative's preliminary findings already indicate that protecting biodiversity and ecosystems could be significantly enhanced by bolstering the traditional knowledge and practices of the people that rely on those places and resources the most: indigenous peoples and local communities. This will also involve a concerted effort to mitigate the threats and challenges currently undermining communities' resilience.

People participating in the first ten CCRI assessments describe a number of different ways in which this support can be provided:

#### Recognising and protecting sacred sites and other areas where natural resources are protected under traditional and/or community governance systems and practices

Indigenous peoples and local communities often locate their sacred sites in highly biodiverse natural areas such as forests, and these sites can become refuges for wildlife when other habitats become degraded. In Ethiopia for example, Sacred Natural Sites are typically located on hills or knolls, and include springs, streams or wetlands and rich indigenous forests. Participants in Sulufou and Fera Subua in the Solomon Islands described how they create geographical and temporal restrictions limiting access to natural resources such as fisheries, specifically in order to husband those resources. Peasants in the San Miguel community in Paraguay explained that they are protecting a small remaining area of forests to protect biodiversity so that they restore larger areas of forest in coming years.

Escalating tensions over land tenure and access to natural resources—combined with the often corrosive cultural and economic influences of western lifestyles and industrialisation-threaten both the sites and the traditional governance systems maintaining them. Policies and measures to promote sacred sites and other conservation areas, and related traditional knowledge and governance systems, are urgently needed. This support can be provided at local, national and intergovernmental levels, and through projects that support and promote such activities, such as this initiative.

For example, Ethiopian participants are calling for a new national level policy

that explicitly addresses and is designed to protect Sacred Natural Sites. Similarly, Ugandan participants called for the recognition of Indigenous territories and Community Conserved Areas (ICCAs) in Uganda, recommending that such areas should be clearly marked and effectively protected through community governance systems. They also called for new legislation that recognises community land, community conserved areas, and traditional knowledge.

Existing international human rights and environmental laws that already recognise the value of ICCAs like Sacred Natural Sites and the role of custodians and communities should be harnessed. In particular, countries that have not yet transposed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIPS) into national law should do so, especially since it explicitly addresses the protection of sacred lands. [3]

"Indigenous People have always considered that this land is sacred and that the welfare and health of the planet depend on their health and conservation. This is the vision that has and is still motivating our communities to maintain the conservation and restoration of our territories. We are seeking to recover usurped ancestral lands, and to restore their vitality, to recreate the forests as they once were before the expansion of western agriculture and deforestation."

Geodisio Castillo [4]

### Promoting ecosystem recovery

The CCRI assessments show that many indigenous peoples and local communities are proactively protecting their local ecosystems and natural resources. There are many examples described in the case studies, from the Guna's traditional system of sacred sites and 'Nainu' agriculture in Panama, and the temporal restrictions on harvesting described by islanders on Sulufou and Fera Subua in the Solomon Islands, through to 'landless' peasants in Paraguay restoring watercourses and wetlands damaged by others.

In Iran, for example, the Farrokhvand Tribe has developed a conservation plan resulting in the rehabilitation of their mid-range territory based on the restoration of endangered species such as wild mountain celery. The Abolhassani have demonstrated remarkable resilience to drought with both indigenous knowledge and innovative solutions, and their efforts have ensured healthy pastures and forests with an abundance of endangered and/or rare plant species. The Abolhassani have worked to rehabilitate the red spotted trout and the brown bear in the Ali Dervish river. The CCRI assessment with the nomadic communities proposed that government policies should incorporate nomadic people's indigenous knowledge and their initiatives (with special attention to elders' judgements on matters relating to natural resources); and that rangeland management should be considered as an alternative to conventional management systems.

These processes should be respected and supported, and threats to them mitigated. In some cases, where the communities do not have the necessary

#### Collating and mapping information about Indigenous people and local communities' traditional territories and natural resources

Supporting communities' efforts to map their territories and resources is a critical first step in promoting the resilience of community conservation. Communities in Ethiopia have been making full use of mapping included two- and three-dimensional maps, sketch maps and eco-calendars as part of an ongoing project between NGO MELCA and local people. The maps generated a more cohesive shared understanding of territorial resources, and helped communities to identify problems and solutions. Using the maps also turned out to be a very effective way of communicating with people outside the communities, including local authorities.

Mapping activities had numerous other benefits as well. The process is generally very inclusive, involving community elders, youths, women and other community members, who would meet several times to verify data. This reinvigorated the transmission of traditional knowledge from older to younger generations. In Ethiopia the eco-cultural calendars were also completed separately by the women and men, and it became apparent that the women had a more extensive knowledge about their resources than the men. This helped the men to understand and acknowledge the importance of including women in the mapping processes.

Source: CCRI assessment in Bale Mountains, Ethiopia. The project work described is supported by the Swedish Society for Nature Conservation and the GAIA Foundation.

means to carry out desired conservation and restoration plans, collaborative comanagement can be a practical option. In Samoa for example, the government and communities recently began working as partners to conserve important coastal habitats such as mangroves. Participants in the Russian CCRI assessment called for the creation of the 'Bikin' National Park as a comanaged protected area, and for the reinstatement of the indigenous division in the 'Udege Legend' National Park.

# Conserving mangrove forests in Vaiusu in Samoa

Women in the Vaiusu community have already established ownership of a mangrove restoration project and there is a strong sense of conviction and long-term commitment. The initiative is expected to restore and secure a safe haven for many fish, crab and crustacean species, and may help to re-establish populations of a number of indigenous bird species. The community has developed village by-laws focused on protecting the integrity of the habitat. These include bans on cutting mangroves, unsustainable fishing practices and dumping rubbish in the mangroves. Anyone found breaching the ban will be dealt with according to cultural measures. The community will also seek assistance from the government regarding proper wastewater management to minimise the proliferation of fibrous green algae that smother mangrove seedlings.

#### Clarifying land tenure, resolving land disputes, recognising and protecting indigenous people's territories, and promoting community autonomy

Conservation capacity and resilience is closely linked to land tenure. UNDRIPS is clear on this issue: "Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired," and states are obliged to give legal recognition and protection to these lands, territories and resources. [5]

The experience of the Guna people in Panama is testament to this. Their situation is unique in that they enjoy what is probably one of the highest degrees of self-governance and autonomy among the indigenous peoples of Latin America. They are in charge of the management of their own territories on the basis of their customary law and traditional rights, and in the 200 years since they left Colombia and settled in the San Blas islands, they have been extraordinarily successful in defending their lands and forest against all kinds of encroachment. [6]

Such an approach could clearly pay significant dividends in terms of protecting biodiversity elsewhere. Chilean participants explicitly recommended public policies that return ancestral lands to the communities of the Mapuche people. They observed that promoting the empowerment and self-determination of Mapuche communities would help them strengthen their culture, rescue their native languages, and improve ways of relating to nature. Udege participants in Russia also called for respect for traditional knowledge and practices, and self-governance via the creation of indigenous councils under the regional and municipal governments of Primorye. People from the communities in Sulufou and Fera Subua in the Solomon Islands

prioritised the rebuilding of a custom house (for elders/men) and the construction of a community house (for everybody) to provide a central space facilitating traditional governance, and community-wide discussions and activities. The participants in the CCRI assessment in Uganda recommended capacity building, exchange visits with other impacted communities, visits to other communities to learn from their experiences, bio-cultural protocols that explain communities' traditional knowledge, practices, territories and resources, and conflict management structures.

Supporting and facilitating local productive activities, including traditional farming, agroecology and community controlled energy systems

Indigenous peoples' and local communities' productive activities are intimately linked to local ecosystems, geophysical conditions and weather patterns. However, the CCRI assessments showed that rapid industrialisation and the pervasive influence of 'western lifestyles' are creating tensions at the community level, undermining traditional governance systems, and driving gradual increases in consumption.

These pressures need to be countered by explicitly highlighting, respecting and supporting traditional governance processes, with a clear focus on their relevance for conserving biodiversity and ecosystems. Again the implementation of UNDRIPS into national laws is essential. But so too is a cultural shift, with changing values being effectively communicated to and within communities, as well as in governmental and intergovernmental circles.

This should include support for traditional farming and agroecology and sustainable and clean community energy as viable and desirable alternatives to the current economic model, which is biodiversity-blind. The nomadic tribes in Iran are calling for government support to maintain traditional food production, such as buying sheep, lambs and dairy products at a fair price, offering fodder and relief to livestock and communities during periods of drought, and more flexibility with respect to grazing licenses.

The role of women in food production is often made invisible, and it is also important to recognise the importance of supporting and strengthening women's role in food production. For example, women in the Bakhtiari Tribal Confederacy in Iran have an important role in herding, dairy and hand crafts production and in seasonal migration. They are consulted in decision-making by their men and, in the absence of the latter, take over the management of all tasks.

In the CCRI Assessment in the Maracaná and Minga Porâ communities in Paraguay, developing agroecological production was identified as a clear priority. Participants in the communities in southern Chile expressed their support for local energy generation projects. Udege communities in Russia flagged up the need for detailed regulations on access to resources developed with indigenous participation, to provide secure access to defined volumes of fish and wildlife resources for indigenous communities.

## Promoting women's leadership

Several CCRI assessments concluded that promoting women's leadership would help the communities to maintain and improve their ability to conserve biodiversity and ecosystems.

In Panama, for example, the women observed that they spend more time with the children and are well placed to pass on traditional knowledge. Chilean participants also recommended women's leadership both in rural and indigenous communities, and in urban spaces. In Russia it transpired that although women seldom hunt or fish themselves they play a significant role in dealing with officials, regulations and documents, and tend to be much more aware of legal details and specific problems relating to fish and wildlife use and management than their men. As a result they often take up leadership positions in communities and associations.

In the Taklé Tribe in Iran, there is already equitable cooperation between men and women, in the sense that although men tend to be present in decision making meetings they consult women in their families about various affairs. However, in the renewed governance system, provision is being made for a Women's Committee as an organ of their community-based organisation. This is intended to develop into something similar to a twoparliament governance system, one for men and one for women.

#### Facilitating intergenerational and intercultural education

Almost all the CCRI assessments identified some element of education, information sharing and awareness raising as being absolutely critical to communities' continued resilience and ability to conserve biodiversity.

For many the focus was on revitalising intergenerational exchanges about traditional culture and practices. This was the main focus of the strategy agreed in Panama. Participants decided to focus on establishing a mainland pilot plot near the shore where some species that are commonly used for food production, medicine, etc., can be found and/or planted. They will use the plot to teach the children how to identify species and understand their importance, and about traditional management systems. Similarly Russian participants decided to establish a training programme for young Udege community members on traditional practices and skills relating to natural resources management and livelihoods. These include language skills, fishing, practices relating to the exploitation of non-timber forest products, and how to operate cars and boats.

Others, in Paraguay, Samoa, the Solomon Islands and Uganda, flagged up their own or their communities' lack of knowledge and desire for more information. In Uganda, for example, there is a need to educate communities about current regulations on fishing and hunting, and to provide information in local languages. In the Solomon Islands people talked about training in land management and conserving and replanting mangroves (including by finding alternative cooking techniques and resources).

### Restoring the status of traditional governance systems in Ethiopia

Ethiopian participants agreed that the status of traditional governance systems could be improved through communityinitiated solutions including awareness-raising within the community about the value and significance of Sacred Natural Sites; peer-to-peer learning exchanges; and support to enable site custodians to fulfil their roles and responsibilities. They decided to set up a dedicated elders group to revive customary laws, norms and ethics with respect to Sacred Natural Sites and to develop by-laws so that the sites are legally protected. They also decided to create a network of custodians in different communities, hosting regular quarterly meetings of the network, and planning community-led strategies and activities for the conservation of Sacred Natural Sites.

Chilean participants also suggested that intercultural education would help to prevent discrimination against indigenous cultures, such as that of the Mapuche people.

Preventing the spread of industrial-scale agriculture and forestry, energy megaprojects and infrastructure on indigenous peoples' and local communities' territories, including through redirecting investments and other perverse incentives

Clearly economy-wide and industrialscale threats are external to the communities and this type of support for communities' resilience requires significant political will from and interventions by government. Such interventions are win-win because they prevent biodiversity and ecosystem destruction by the incoming industries; at the same time they enhance communities' resilience and commitment to conserving and enhancing their territories and resources.

These are immediate and pressing priorities for the communities participating in these assessments. Russian participants were concerned to prevent the overexploitation of salmon by industrial fishing fleets, and to stop illegal and unsustainable logging. Chilean participants called for limits to the installation of energy megaprojects and a new focus on supporting sustainable and clean community energy. In Samoa, people wanted to reduce the conversion of mangroves into business and residential areas, and to control sand mining. Communities in the villages of Bukaleba, Kalangala and Butimba in Uganda recommended improved dialogue between communities and investors to entrench rights and respect the free, prior and informed consent of the communities, and respect for human rights in line with the UN Guiding Principles on Business and Human Rights. [7] They pointed out that communities' negotiating capacities also need to be strengthened.

#### Improving communities' capacity by improving community infrastructure and services

Whilst communities are generally motivated to conserve their local resources and environment, the preliminary results from this assessment show that there are significant economy-wide and systemic cultural influences that are difficult to address. Nevertheless, providing financial and technical support to communities will strengthen their capacity to address specific issues.

In particular, increased state support for infrastructure and processes that benefit communities is essential to their resilience. This includes funding for education, medical services, power supply and water services.

#### Providing financial and technical support to communities to bolster their resilience

Support for more communities to engage in CCRI assessments and strategies would also help to develop a critical body of information that can be shared and replicated. Support from external actors, especially the government, donor agencies and NGOs, can play a pivotal role in enhancing the resilience of communities and associated biodiversity. Outside assistance can be particularly helpful in terms of providing dedicated project funding. Examples of project activities that could be financed include:

- technical aspects of ecosystem recovery
- the identification and classification of species
- community mapping of territories and community conserved areas
- documenting community conservation initiatives and research into their biological impact
- integrated invasive plant management
  fencing initiatives
- the reforestation of indigenous tree seedlings around water sources
- community environmental education
  assistance with writing and implementing action plans
- · support with project monitoring
- assistance in building the capacity to advocate for communities' particular interests and needs, including at the local and national levels.

It would also be useful to secure increased financial and technical support to undertake research to determine the biological impact of community conservation initiatives. Other more general support would also bolster communities' resilience, allowing them to more effectively:

 strengthen processes and structures facilitating community representation in different decision-making processes

develop linkages between the communities and national institutions, government officials and international organisations

promote the participation of women in community decision-making and project implementation promote information exchanges between communities

- raise awareness about improving resilience against the impacts of climate change, and
- review legislation, advocating for change, and become involved in relevant decision-making fora.

### 🖐 Notes

[1] To find out more about the methodology go to: http://globalforestcoalition.org/wp-content/uploads/2014/06/New-Last-CCR-Initiative-methodology\_May-2014.pdf http://www.scielo.cl/scielo.php?pid=S0716-

078X2009000300004&script=sci\_arttext . Accessed July 31, 2015

- [2] ICCAs refer to 'Indigenous Peoples' and Community Conserved Territories and Areas'
- [3] http://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1165&context=iip
- [4] http://www.globalforestcoalition.org/wp-content/uploads/2010/11/Report-Getting-to-the-roots1.pdf
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