

STRENGTHENING COMMUNITY CONSERVATION EFFORTS IN NAGALAND: A PROGRAMME TO IMPART TECHNICAL SUPPORT ON BIODIVERSITY CONSERVATION AND LIVELIHOOD OPTIONS

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**Nagaland Empowerment of People through Economic Development
Kohimã**



**Sálim Ali Centre for Ornithology and Natural History
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A PROGRAMME TO IMPART TECHNICAL SUPPORT ON BIODIVERSITY
CONSERVATION AND LIVELIHOOD OPTIONS**

Final Report Submitted to
Sir Dorabji Tata Trust, Mumbai



**Nagaland Empowerment of People through Economic Development
Kohima, Nagaland**

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**Salim Ali Centre for Ornithology and Natural History
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SUMMARY

The people of eastern Nagaland largely depend on forests and natural resources for their livelihood; agriculture, food and other requirements such as timber. Nagaland is a special category state of the Indian Union, interference from outside agencies to its religious and social practices, customary laws and procedures, administration of civil and criminal justice, and ownership and transfer of land and its resources are not welcome or unacceptable. The Village Councils (VC) and Village Development Boards (VDB), important bodies that are readily available at grassroots level social organizations, acceptable without exception, act as a linkage between the people and the government. Over 95% of the forest lands in Nagaland are owned by the local communities. Taking clue from the above points, an attempt was made to initiate and strengthen the process of environmental conservation involving local communities. The present programme was undertaken between April 2007 and January 2011 with the following objectives.

- Assist villages that already possess or propose to have Community Conservation Areas (CCA) in developing Biodiversity Registers (BR), resource maps and management plans, and develop the process by which BR are legally protected.
- Advocate and assist establishing CCAs, where such efforts are currently not in place.
- Documentation of Indigenous Ecological Knowledge (IEK).
- Identify technical, developmental and financial requirements for sustaining CCAs.
- Provide necessary technical support and linkages to information, process, markets and developmental and financial programmes, to villages that are developing CCA.
- Use Blyth's Tragopan, *Tragopan blythii* (Jerdon, 1870), the State Bird of Nagaland, as a flagship species in enhancing conservation reach among locals.

The Phase I of the programme was implemented in five eastern districts *viz.* Phek, Tuensang, Mon, Kiphre and Longleng during April 2007-January 2011. The local inhabitants of the area are *Konyak, Khiamniungan, Chakhesang, Sangtam, Pochuri, Sema, Phom, Chang* and *Yimchunger*.

The purpose of this programme was to develop mechanisms by which the community conservation efforts in Nagaland, wherein many communities have set aside areas within their village lands with restrictions on hunting, fishing, and tree felling by way of resolutions passed by the Village Councils (VC), are strengthened and expanded and lead to livelihood benefits. It was planned to fulfil this task by (i) Identifying technical, developmental and financial requirements of CCAs (ii) Providing necessary technical support and linkages to developmental and financial support and (iii) Advocating the establishment of CCAs, where such efforts are currently lacking.

Considering the objectives, a holistic and multi-institutional approach was adopted with resource persons/ experts drawn from diverse field relevant to biodiversity conservation with experience in administration, conservation and management and social studies. The team at various levels interacted and planned the entire work and implemented the programme including workshops, training programmes and advocating for CCAs. The team as a bottom-up approach is, members of about 370 villagers, 29 Facilitators of Community Conservation (FCCs), Project Operation Unit (POUs), Resource Persons, Experts in various fields, Associate Coordinators, Coordinator, Programme Advisory Committee and Team Leader. Resource persons were invited from various Government and Non-government Organisations, Universities and Colleges to impart training and guidance in the field as diverse issues were involved in the programme.

Capacity building at local level was one of the major activities of the programme, which was considered essential to empower people in nature conservation. The success of the whole program was depending primarily on the work of FCCs, a ground level staff recruited from various tribal groups. The FCCs acted as bridge between villagers and the other project partners and outside experts. In the beginning of the programme, workshops were conducted for FCCs focussing programme objectives, forest and village background, data collection procedures, equipment handling and maintenance, Indigenous Ecological Knowledge (IEK) pertaining to plants and animals, plant collection protocol and herbarium procedures, preparation of resource maps, GIS/GPS tools and techniques and Biodiversity Register.

Resource mapping of the eastern districts of Nagaland for the programme purpose included, assessment of (1) road network (2) drainage network (3) digital elevation models (4) land use and land cover and change analysis and (5) mapping of potential CCAs having village council resolutions.

Analysis with regard to the road networks of the five districts of eastern Nagaland showed the availability of about 2400 km surfaced and 3600 km belonging to other categories. The *Dikhu* and *Tizu* are major rivers of Nagaland, which drain through districts. While the *Dikhu* river confluences with the Brahmaputra in Assam flood plains, the *Tizu* drains into Myanmar. The eastern districts, as per 2007 satellite imageries had 83% of forest cover. Among the forest types, Moist mixed deciduous forest had the highest proportion (29.08%) of cover.

Change detection analysis with respect to Land Cover and Land Use between 1991 and 2007 showed notable changes. Of the seven land cover categories analyzed, three showed negative impact i.e. reduction in area. About 47% of the evergreen forests were lost in past 17 years. 100% change i.e. increase in cover was observed with respect to Scrub and Bamboo forests and 77% increase in degraded forests. Overall, the *Jhum* area has decreased by 16% in a span of 17 years. However, in all, the abandoned *Jhum* increased by about 59%, indicating that locals are losing interest in agriculture. Mapping of 230 CCAs was done and the present CCA covered at least 123 patches of primary forests i.e. undisturbed evergreen forests.

As on date, the eastern districts of Nagaland have about 765 CCAs, small protected forest patches owned by villages. Mon district had the highest number of CCAs compared to that of other districts. Among them, only 157 were declared by resolutions passed in the Village Councils. During the course of this work, it was felt that protecting small patches of isolated forests would not help conservation in a long run. Hence, it was decided to coordinate with neighbouring villages with CCAs to have joint CCAs. After several detailed deliberations among communities of various villages, resolutions for seven joint CCAs were possible. Among them, one Saramati Awung Community Conservation Area has already been declared on 31 October 2009 in a ceremony at Penkim Village, Pungro, Kiphre district by the Honourable Parliamentary Secretary, Shri. R Thohanba, Government of Nagaland. Resolutions have already been passed by the communities for declaration of CCAs such as Hongmong Conservation Committee, Yai Zone Wildlife Control Managing Committee, Phoyisha Range Conservation and Helipong Khong Joint Biodiversity Conservation Area. The Yai Zone Wildlife Control Managing Committee (Shamator) and Nokesan area Community Conservation Area (Noksen), both in Tuensang district are to be resolved further by the stakeholders with respect to further action. Data/ information on the current state of environment these Joint CCAs have been collected and discussed.

Understanding of the locals on the Blyth's Tragopan, *Tragopan blythii* (Jerdon, 1870), the State Bird of Nagaland as flagship species in conservation was assessed. Interviews were conducted in 269 villages and the inhabitants of 83 (31%) villages were aware of the occurrence of this species in their forests. Qualitative analysis showed that in only 18 (16%) locations, the birds were common, in 50% of the locations, they were declining and in 22 (27%), it has been disappeared locally. During the survey, people of almost all villages showed interest to initiate programme to conserve this species. Villages such as Washelo, Iponger, Angphang and Yakshu have passed resolutions to protect the Blyth's Tragopan from being hunted in their area.

Locals of Nagaland possess a rich tradition of Indigenous Knowledge (IK) with respect to local ecology and environments. Information on IEK is important for Natural Resource Management (NRM). Data on IEK with respect to plants and animals were collected for 246 and 269 villages respectively. This programme attempted to create Peoples Biodiversity Registers at village level in about 270 villages. Currently, the electronic data in this regard is being held/ owned by NEPED. Final output, the Biodiversity Registers would be supplied to the villagers and the modalities are being worked out for managing these databases.

Various pointers/ factors were monitored with respect to the probable impact of this programme in the area. The programme provided the much needed opportunity for environmental researchers and conservationists to interact with stake holders in Nagaland. Training to 29 FCCs (locals) in environment and biodiversity conservation during the programme was an important activity, which would take the conservation movement of Nagaland forward in the years to come. It is to be noted

that due to the implementation of the present work, about 50-55% of the people of eastern Nagaland got some awareness/ understanding pertaining to nature and biodiversity (flora, fauna) conservation. Resolutions passed by the Nagaland Baptist Church Association (NBCA) and major Students' Unions/ Organizations of Nagaland state urging people to stop hunting wild animals and cutting trees are considered as notable achievements by the programme. This programme had resulted in a significant increase in number of CCAs in Nagaland. Number of CCAs based on resolutions passed in the Village Councils increased from 109 prior to the present programme (2007) to 285 (2011). The concept of Joint CCA in the region is gaining momentum in the state and the same is an important outcome of the present work. One of the notable outputs among them is Joint Conservation Committees formed during this study; example - Saramati Awung Conservation and Management Society involving 17 villages. Print media published numerous articles related to environmental conservation in Nagaland. A total of 238 articles could be located in local, regional and national newspapers and magazines from 2009 to March 2011. Among them, a vast majority (84%) had circulation within Nagaland.

Biodiversity conservation involving people is a lengthy and complex process. Sustained efforts should be made to keep up the interest of the people. Continuous technical support is needed to sustain these efforts in the area. Alternative livelihood options need to be explored for villagers involved in CCAs, as these and other joint CCA committees declared self imposed ban on hunting and tree felling in their protected areas. Protecting the declared area from intruders is another major task, and incentive programmes to villagers and funding to the CCAs are required. Market linkage to sell the local produces, development of amenities and managing Peoples Biodiversity Registers and getting legal status for the same are important for sustaining the efforts made so far.

Generation of primary data with respect to biodiversity wealth of CCAs and monitoring them are important for conservation. Capacity building at local level by training the stakeholders are needed, and these activities could be undertaken by agencies such as SACON with expertise in the field. Extending the present work to other districts of Nagaland and perhaps to other North-eastern states of India utilizing the experience gained would help environmental conservation in the region.

Approach with respect Community Conservation in Nagaland or in any area with native people should be done following transparency and open discussion, listening to the need of the people and capacity building in Participatory Rural Appraisal mode. One must respect the prevailing local sentiments, customary protocols and laws while executing the work. The studies should follow Free Prior Informed Consent Processes. The locals must be told about the purpose, methodologies and intended outcome of the research, including potential merits and demerits. It should be kept in mind that the end product should be empowerment of locals for taking control of their resources and plan conservation strategies without seeking external support endlessly.