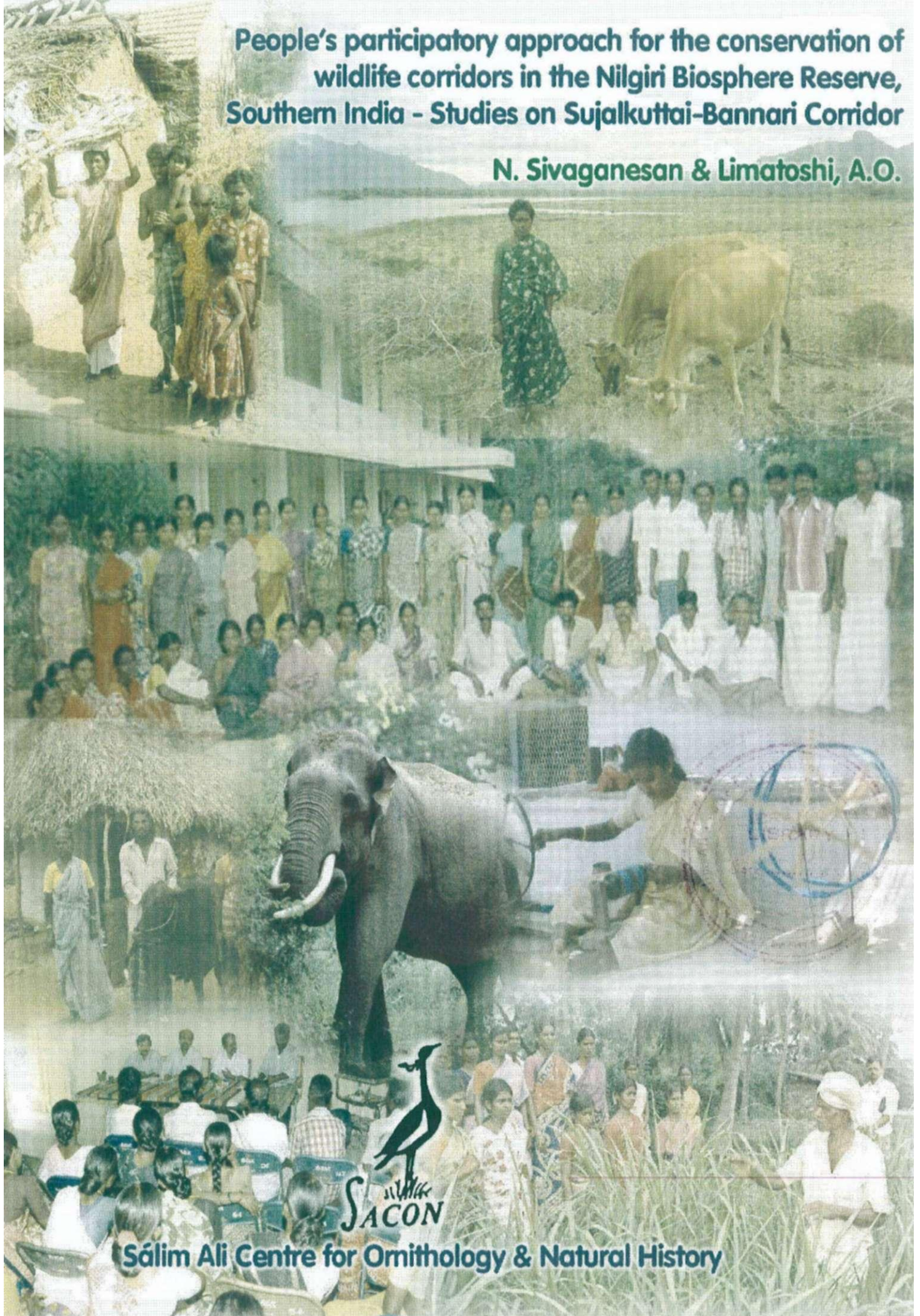


**People's participatory approach for the conservation of
wildlife corridors in the Nilgiri Biosphere Reserve,
Southern India - Studies on Sujalkuttai-Bannari Corridor**

N. Sivaganesan & Limatoshi, A.O.



**SÁLIM
ALI CENTRE
FOR ORNITHOLOGY
& NATURAL HISTORY**

Sálim Ali Centre for Ornithology & Natural History

**People's participatory approach for the conservation of
wildlife corridors in the Nilgiri Biosphere Reserve,
Southern India - Studies on Sujalkuttai-Bannari Corridor**

Final Report

Submitted to the Small Grant Programme (SGP)-UNDP (GEF), India

Host organisation

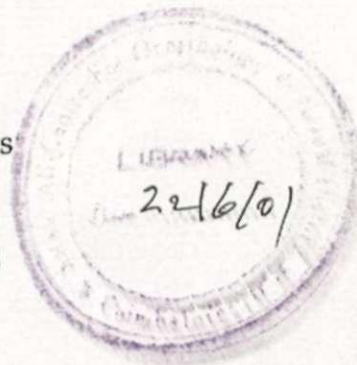
**Centre for Environmental Education
Nehru Foundation for Development
Ahmedabad 380 054**

Principal Investigators

**Dr. N. Sivaganesan
Limatoshi, A.O., IFS**

Project Staff

G. Sivasubramanian



Sálim Ali Centre for Ornithology and Natural History

2001

Dr. N. Sivaganesan is a Scientist in the Conservation Biology Division. His Masters Degree was in Wildlife Biology and he obtained his Ph.D. from the Bharathidasan University, for his studies on the Ecology of the Asian Elephants. Over a decade he has extensively studied Asian Elephants in Western Ghats in South India. In recent years, he has studied forest corridors and its management through community participation.

Mr. Limatoshi, A.O., IFS is a forest officer from Tamil Nadu cadre. He has worked two years as District Forest Officer in Sathyamangalam Forest Division during the project period. He has keen interest and dedication to uplift the villagers in forest settlements through joint forest management.

Mr. G. Sivasubramanian, Research Fellow obtained his masters degree on Wildlife Biology from AVC College (Autonomous-Bharathidasan University) and presently working with Wildlife projects of the Tamil Nadu Forest Department

CONTENTS

Preface	i
Acknowledgements.....	iii
Summary	v
Introduction	1
Objectives	3
Study area	4
Bhavanisagar Reservoir	5
Study villages.....	5
Sujalkuttai.....	6
Pungar.....	6
Doddampalayam	8
Pudupeerkadavu	8
Rajan Nagar	8
Results & Discussion.....	9
Vegetation association and quality of the Corridor.....	9
Regeneration and recruitment.....	10
Use of corridor by elephants	10
Resource users of the corridor.....	11
Extent of lopping on trees.....	12
Other kinds of stakeholders	15
Confidence building exercise.....	16
Development of alternate livelihood.....	17
Identification of wood cutters	17
Workshops and training	20
Training on alternate livelihood	21
Revolving fund	24
Project monitoring.....	24
Evaluation of the project.....	28
Villagers needs from government institutions	32
Corridor protection committee	33
Extension activities.....	34
Crop damage	34
Other benefits to the woodcutters	36
Tamarind plantation (graft) in the community land	36
Biogas to the villages.....	36
Fuel wood depot.....	37
Awareness education for people's representatives	37
Temporary jobs from local industries	37
Visit to rural institutes	37
Lessons from the project that could be of relevance to other people's participatory schemes.....	38
References	39
Appendices	43

SUMMARY

The goal of this study was to demonstrate people's participation in the management of Sujalkuttai-Bannari corridor that is small in size but important to conservation at a regional scale in the Nilgiri Biosphere Reserve.

The objectives of the project were to assess a) vegetation association in the corridor and its use by elephants, b) identify various stakeholders and their socio-economic status, c) assess the impact of woodcutters on trees with special reference to food plants of elephants, d) organize workshops and training on participatory themes particularly for establishing income generation activities for resource users, e) evaluate the project benefits to the woodcutters as well as obtain feedback from the field staff, g) monitor the project with regard to extent of pressures that was relieved from the corridor as a result of this scheme and h) create an awareness programme for the local stakeholders of the corridor. The study was carried out from June 1996 to March 1999.

Villagers belonging to Sujalkuttai, Pungar, Peerkadavu, Rajan Nagar and Doddampalayam were using the corridor for collection of wood, grazing and collection of non-timber forest produces (NTFP). These five villages were selected for this project and the major stakeholder group, in this case woodcutters, were facilitated to involve in the process of participation.

Studies on vegetation showed that although 36 species were recorded from the sampled area of 0.55 ha, shrub species dominated the corridor. *Fluggia leucopyrus* was the most abundant species followed by *Grewia villosa*, *Randia malabarica* and *Solanum torvum* and all these species together contributed 75% of the total plant species. The greater extent of shrub species in the corridor is possibly due to illegal collection of mature wood by the local villagers.

Plant saplings of < 1 m height was commonly seen than recruitment saplings of > 2 meters. With the result of severe grazing pressure by scrub cattle, ground cover was mostly dominated by unpalatable plant species namely; *Euphorbia antiquorum*, *Prosopis juliflora*, *Lantana camara* and *Stachytarpheta indica*.

The high use of (136 individuals) of elephants in dry season in a relatively small area of the corridor revealed the significance of the part for seasonal migration of the animals from Moyar Valley to Eastern Ghats and back.

The bench mark survey revealed that 174 families of the focal study villages used the corridor for various purposes. Among them, 59 families totally dependent on the corridor for collection of wood to sell it in the local market to meet their daily livelihood. Among the 18 species of plants subjected to wood cutting, 13 of them were food plants of elephants. It is interesting to note that pole sized saplings of trees were felled extensively leading to degradation of vegetation in this region.

The project team made every effort to meet often the woodcutters in the field to develop confidence mechanism for preserving the corridor. A number of workshops and training programme were organized to bring the woodcutters under a common platform before implementing the income generation activities.

The development of alternate livelihood for the woodcutters was established with the involvement of various local institutions who indicated their support both financially and logistics wise. Rural development authorities of Erode District were the potential donor for establishing the income generation activities.

Workshops and training programme were organized for the woodcutters for several days for an effective implementation of alternate livelihood. Various schemes and framework for effective monitoring of the project were discussed individually with each member. The workshop also addressed the issues related to merits and demerits of the project and necessity for weaning away the traditional wood collectors after getting the sustenance scheme functional.

Villagers belonging to Sujalkuttai, Pungar, Peerkadavu and Rajan Nagar selected dairy scheme and Doddampalayam villagers selected weaving units as their livelihood activities to stop the wood collection from the corridor.

After the training programme on the livelihood scheme for the woodcutters, the District Rural Development Agency, Erode District, local Panchayat union and the project team assisted the woodcutters in establishing assets for their livelihood. A total of Rs 5,77,750 was spent including bank loans for creating alternate livelihood activities for 59 families. Community land was made available to the woodcutters by the local forest department to develop fodder for the animals.

The woodcutters gave oath of declaration for not visiting the corridor after availing the income generation schemes and the declaration signed by the individuals was sent to the forest field staff for verification in the field. The project activities were informed to the local legislative members and Grama Panchayat Presidents to gain their support and made the project in a transparent fashion without any political influences.

A committee comprising of field staff of forest, rural development agency and panchayat union monitored the overall activities of the project, especially the extent of daily economic returns to the woodcutters after availing the scheme

and extent of biotic pressure relieved from the corridor due to villagers' abandoning their visit to corridor.

The extent of success of the project in terms of economic benefit to the woodcutters varied among the study villages. For instance, the villagers from Sujalkuttai, Pungar and Doddampalayam have benefited substantially from these livelihood schemes. This has considerably weaned away the pressure on the corridor. Several actors such as caste homogeneity, small sized settlement and its location within the forest have made the success of the project in Sukjalkuttai-Bannari corridor easier.

After the establishment of livelihood scheme (during the end of the project period 1998), 70% of the woodcutters have abandoned their activities in the corridor. Thus, this approach would provide an example for the conservation of elephant corridor through people's participatory programme elsewhere.. However, it is too early to conclude precisely the success rate of the project. The policy makers and administrators perhaps should encourage conservation policies in this direction at least for some crucial areas, even if it requires some amendment to the present financial rules of the government.

An evaluation processes was done for the woodcutters at the end of the project period to assess the ground realities on the outcome of the project. The outcome of the evaluation process help to design the future programme for the woodcutters to develop the scheme in a more sustainable fashion.

During the process of the project evaluation for the forest field staff it was found that institutional reform assumes greater importance as far as the future of participatory project is concerned. Most of the field personnel have indicated the

importance of temporary job opportunity for the woodcutters as a measure of total elimination of biotic pressure from the corridor.

The woodcutters belonging to Sujalkuttai settlement formed a "Corridor Protection Committee" with their primary duty being discouraging other stakeholders (graziers and NTFP collectors) of the corridor from exploiting the resources and to protect the corridor from illicit felling apart from reporting carcasses of wild animals to the forest field staff.

The extension activities were targeted for all the corridor dependent villagers during the first year of the project itself. Posters showing the plight of the elephant corridor because of wood collection and role of people's motivation in conservation were supplied to villagers and local offices.

Other activities that were initiated during end of the project Viz., supplying hybrid variety of tamarind saplings for the woodcutters, distribution of biogas to the villagers, establishing subsidized fuelwood depots, organizing awareness programme on people's participation themes, providing temporary jobs to the woodcutters and visit of woodcutters to other rural institutions involved in similar activities.

Lessons from the project that could be relevant to other people participatory schemes

1. The participatory project should be acceptable to the villagers in principle before its implementation begins which means that a thorough benchmark survey of the area has to be done with the involvement of the villagers.
2. A participatory project could be more successfully implemented, if greater proportion of women is represented in the project.

3. The acceptability of the participatory project depended on the ethnic composition of the community. For instance, villages dominated by a single community were to be more successfully involved in the participatory exercise.
4. The income generation activities should be designed without complex maintenance procedure. For example, dairy units required more maintenance than weaving units. However, the stakeholders require immediate daily return from the income generation activities.
5. Other than livelihood activities through the participatory exercise, efforts should be initiated for mobilizing other sources of temporary jobs to ensure sustainable economic development of the villagers.
6. It is necessary to motivate the stakeholders thoroughly to involve themselves in the income generation, even after the project personnel leave the place. This mechanism was not available in several cases. Such a mechanism is needed from the beginning of the project itself.
7. The creation of income generation activities with the banker's assistance needs to be dealt with carefully. Most of the stakeholders do not repay their bank dues in time. Such irregularities might affect the long-term sustainability of the project and stakeholders might resume their traditional forest dependence.
8. A people's participatory project should have a duration more than five years to implement various integrated micro plan activities, particularly in terms of sustainable economic benefit to the villagers which could reduce their forest dependence.
9. The support and assistance of the local political parties are important for the successful implementation of the project.