

RECOMMENDATIONS FOR MANAGEMENT ACTION PLAN ACHANAKMAR-AMARKANTAK BIOSPHERE RESERVE

Based on the findings of the project of Lead Institution for Achanakmar-Amarkantak biosphere reserve, Phase-I and Phase-II and observations recorded during the tenure of project periods (2006-2009 and 2010-2013), the following suggestions are being made for their possible use in implementation of Management Action Plan (MAP) :

Conservation of endemic species such as *Bothriochloa grahmii*, threatened economically important plants *Rauvolfia serpentina*, *Adiantum capillus*, *Lygodium flexuosum*, *Clerodendrum serratum*, *Acorus calamus* and *Eulophia herbacea* and their habitats : This can be achieved after short listing localities from collections of herbarium.

Reclamation of degraded habitats : Native plant species, such as *Terminalia bellirica*, *Terminalia tomentosa*, *Terminalia chebula*, *Ficus bengalensis*, *Syzygium cumini* and *Embllica officinalis* should be specifically raised in nurseries by collecting seeds from BR itself. This can be done in gaps and thinly covered areas like Kota, Lormi and Pendra ranges.

Bamboo plantation : The tribal communities in 6-8 villages in core zone of biosphere reserve, the 'basod' the artisans of bamboo, draw their livelihood from bamboo. Their occupation is largely dependent on bamboo, thus forming bamboo an integral part of their lives. Therefore, plantation of indigenous bamboo, *Dendrocalamus strictus* in buffer zone of BR like Kota and other places may be taken up.

Providing training of bamboo artifacts : While bamboo artisans have been making traditional items, training from other artists to prepare market driven decoration and urban utility items will give more value for their products and assistance for marketing.

Mahul patta collection : Sustainable collection of Mahul patta can be promoted in Gourela range in buffer zone of BR. Installation of plate making machine can be done for preparing value added product for better price.

Tikhur plantation : Tikhur atta (starch flour of *Curcuma angustifolia*) is a medicinal product especially processed by Baiga population along Maniari river. There is need to train them to collect sustainably and by non-destructive methods and replenishment in that area.

Tasar culture as an approach for enhancement of livelihood : Rearing of tasar silkworm on host plants like *Terminalia* sp. has a vast potential in buffer zone of BR like Lormi (Chatterjee *et al.*, 2007 published in Research Needs for Achanakmar-Amarkantak Biosphere Reserve).

Lac culture as another livelihood option : BR buffer zone has multiple species of *Flemengia* which can be tested for potential as Lac insect host.

Training : There is need to train villagers in buffer zone in Gourela and Lormi range in collection of medicinal plants and increase number of units preparing ayurvedic preparations like *Ataria*. Proper collection time, grading, drying and processing will fetch more value for their produce even as raw material to larger local companies like in Bilaspur and Raipur.

Interpretation centre : Establishment of interpretation center in entry points of core zone with visual as well as specimen and documentary models, photographs, posters and audio-visual aids will attract and create awareness about BR, its importance and role in conservation (web site Sunderban BR). In addition, road side boards indicating clearly core, buffer and transition zones of BR are necessary for demarcation and better protection of BR.