

REPORT
ON
MONITORING OF DEVELOPMENTAL ACTIVITIES
OF ACHANAKMAR –AMARKANTAK BIOSPHERE
RESERVE IN CHHATTISGARH UNDER
MANAGEMENT ACTION PLAN 2009-10



Submitted
by

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MARCH, 2011

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Introduction:

The Achanakmar-Amarkantak Biosphere Reserve is notified as the 14th National Biosphere Reserve of India by Government of India on 30th March 2005. It is spread from Maikal hill ranges to the junction of Vindhyan and Satpura hill ranges in a triangular shape in Chhattisgarh and Madhya Pradesh states of Indian Union. It falls in Malayan realm, Tropical Dry or Deciduous Forest Biome and Deccan Peninsular bio-geographic zone of the country. Its total geographical area is 383551.0 ha. The core zone, which falls in Bilaspur district of Chhattisgarh state (CG), is dense forest with terrains of hills and valleys and spread over in an area of 55155 ha. It is protected to conserve its richness in flora and fauna due to its erstwhile status of Wildlife Sanctuary. The buffer and transition zones, consisting of 205898 ha, fall in Bilaspur and Marwahi forest divisions of Chhattisgarh state and the remaining 122494 ha in Madhya Pradesh state (MP). The vegetation or forest types and subtypes met in the BR are: Northern Indian Tropical Moist Deciduous Forests, subtype Northern Indian Moist Deciduous Forests consisting of Moist Peninsular sal forest moist high level sal forest, moist low level sal forest, moist valley sal forest and Northern Indian Moist Deciduous Forests sub-type Moist Mixed Deciduous Forests; Northern Tropical Dry Deciduous Forests subtypes Dry Peninsular sal Forests and Northern Dry Mixed Deciduous Forests. The present Biosphere Reserve (BR) encompasses a variety of ecosystem like sal forest, mixed forest, degraded forest and agro-

forestry ecosystems. The various floral and faunal species, various micro and macro-ecosystems evolved or undergoing evolution, hydrological and mineral cycling, climate change, etc. are the special characteristics of the area, which has its regional as well as global significance in biodiversity conservation. The drainage system of BR consists of rivers originating from the core and buffer zone and a water check dam known as Khudia dam situated on the Maniari river towards south-west of the BR and Sihawal Sagar lake which fulfill the needs of inhabitants and wildlife.

Inhabitants & their socio-economic profile

Nearly 7,617 traditional primitive tribal inhabitants, as per the population census of the year 2001, are settled in 22 villages of the core zone. The buffer and transition zones of BR comprise of 396 villages and sub urban areas. Of which, 225 forest and revenue villages and sub urban areas with a population of 2,90,021 persons live in buffer and transition zones falling in Bilaspur and Marwahi forest divisions of Chhattisgarh. Major residential areas or settlements in buffer and transition zones are Kota, Khondri, Dindori, Lormi, Akhrar and some revenue and forest villages. There are 27 communities consisting of Baiga, Gond, Dhanwar, Kol, Kanwar, Oraon, Chamar, Sais (Sarhi), Basore, Lonia, Muslim, Sindhi, Brahmin, Rajput, Goswami, Baraith, Kalar, Kumhar, Kewat, Nai, Ahir (Raut), Panika, Sondhiya, Lohar, Maratha, Sonar and Baniya reside in these two zones. The baigas are primitive Dravidian tribe. Presently, the baigas are dominant in population and ranked on the top among the other tribal communities in the BR. Mahamai village has two hamlets namely Babutola and Ghameri where 13 and 45 families are living respectively from last 10 to 15 years. Baiga is an endogamous group. The population of baiga is increasing due to the high

birth rate and immigration from other parts of the state. Gonds also have their origin from Dravid culture. Their economy is largely dependent on agriculture. Kols migrated to BR from Singhbhum district of Jharkhand province. Oraons are also Dravidians tribe migrated from Chhota Nagpur. Some of them have come from Sarguja district and settled in BR in early eighties. They are settled in Surhi, Jakadbandha, Daganiya, Mahamai, (core zone) and Jamunahi, Ghameri and Babutola (transition zone). All tribal and non-tribal inhabitant, get fuel, fodder, edible roots and tubers from forest besides cultivating some seasonal agricultural crops like wheat, maize, etc. in small areas. The cattle are low milk producing, unproductive and dependent on forest for grazing. Some of the inhabitants are engaged by state forest department as labourers for developmental activities of the BR. Lack of education, unapproachable roads and footpaths in remote areas are some of the main huddles in upliftment of the economic status of the inhabitants. Non- wood forest produce collection plays a vital role in the economy of the inhabitants.

Monitoring & Evaluation Committee:

1. Dr. K. C. Joshi, Retd. Scientist G, Expert (Biosphere Reserve)
2. Dr. N. Roychoudhury, Scientist F and Head,
Forest Entomology Division, Tropical Forest research Institute,
Jabalpur (M.P.)

Methodology:

The information on various developmental activities conducted by Achanakmar- Amarkantak BR authorities in Chhattisgarh part of BR was collected from the Director, Achanakmar- Amarkantak BR, Koni, Bilaspur. A copy of the Annual action plan approved by Government of India, Ministry of Environment and Forests, New Delhi for the year 2009-10 vide letter no. 9/07/2009-CS/BR dated 2.12.2009 (Annexure I) and the actual work done on priority on the basis of released installment of Rs.72 lakhs was also collected (Annexure II). The various activities conducted at different ranges of BR were monitored and evaluated physically from 23.02.2011 to 25.02.2011.

Locality visited

Koni (Bilaspur), Chhuhia, Belpat, Keonchi, Ranjaki (Lamni), Tanglipathar, Chhaparwa, Nawagaon (Belgahana), Khodri, Kota, Lormi, Sidda Takri (Jhojhha), Kotsagar, Achanakmar, Mandla, Shivtarai, Newsa, Pataita, Kori, Gobripat, Surhi, Bhutkachhar, Tilaidabra and Gorella.

Physical Verification of Various Developmental Activities

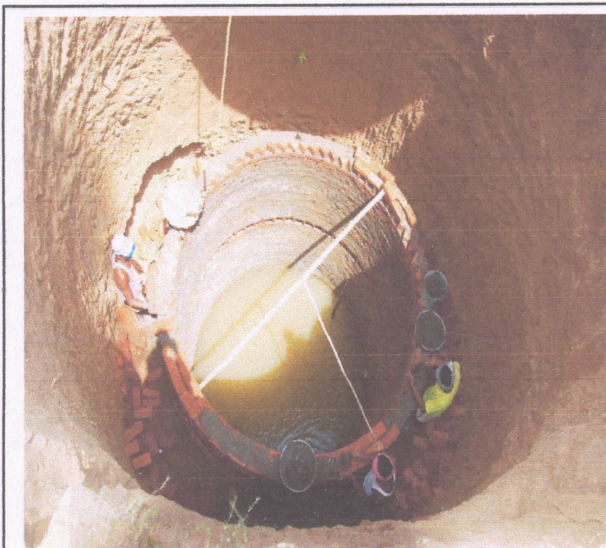
The committee visited forest nurseries at Nawagaon (Fig. 1-4), rehabilitated degraded forest areas of Khodri and Lamni ranges (Fig. 5-8), nature trails at Tanglipathar (Lamni range) and Kotsagar (Kota range), eco-developmental areas and other activities conducted localities from 23rd to 25th Feb. 2011. The progress done as per target is summarised as hereunder:



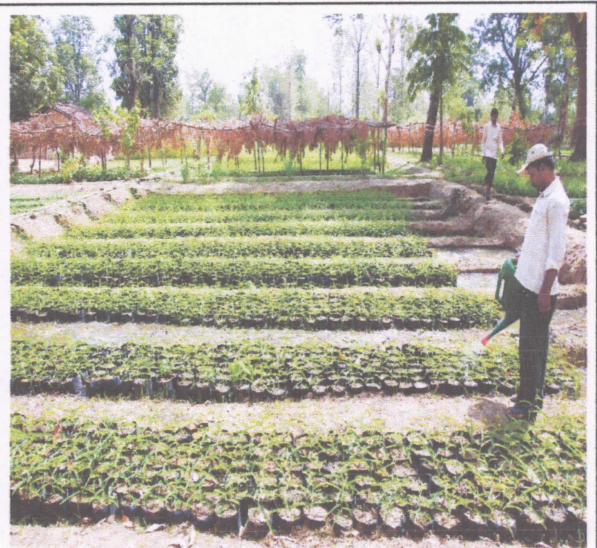
1. डेवलपमेन्ट आफ नर्सरी---नवागांव (बेलगहना परिक्षेत्र)



2. डेवलपमेन्ट आफ नर्सरी---नवागांव (बेलगहना परिक्षेत्र)



3. डेवलपमेन्ट आफ नर्सरी---नवागांव (बेलगहना परिक्षेत्र)



4. नर्सरी---बेलगहना

A. Protection of biosphere reserve:

1. A new forest nursery was developed in 5 ha area at Nawagaon (Belgahana) besides the existing forest nurseries of the BR located at Khodri, Gaurela, Kota, Lormi, Pedra and Bilaspur to get sufficient number of seedlings of tree species. Irrigation facilities at Nawagaon were explored by digging a well (Fig. 3) at the newly developed nursery. In all, 1.5 lakh seedlings of miscellaneous species viz. Jackfruit, Khamer, Custard apple, Aonla, Karanj, Bamboo, Jamun, Teak and Tamarind were raised in all these seven nurseries. The seedlings were collected and distributed to the villagers as per detailed below for plantation in their agriculture bunds and other wastelands.

Details of miscellaneous plant species collected from nurseries and distributed for plantations

Forest Range	Name of nursery	Plant species	Nos. distributed	Distributed at locality
Belgahna	Nawagan nursery no.1	Jackfruit, Khamer, Custard apple,	10,000	Sonpuri, Loofa, Baheramuda, Khongsara, Nawagaon
Khodri	Khodri	Aonla, Karanj,	10,000	Villages under Khodri range
Gaurala	Gaurala	Bamboo, Jamun,	10,000	Villages under Gaurala range
Kota	Kota	Teak, Tamarind	10,000	Villages under Kota range
Lormi	Lormi		50,000	Villages under Lormi range
Pendra	Pendra		10,000	Villages under Pendra range
Bilaspur	Bilaspur nursery no 1.		50,000	Bilaspur and Imlibhata Birkona

The plantation was supervised by the field staff. Planted seedlings of above species on field bunds/ fallow land of villages at Nawagaon, Khodri, Kota, Lalpur, Pataita, Sajapali, Lakhodna, Sonpuri, Lormi and Bilaspur were verified by the committee.

2. Rehabilitation of Degraded Forests (RDF) in 100 ha at Chuhiya, Belpat, Keonchi, Ranjki (Lamni) was conducted by using various techniques like making soil bunds, water canals to prevent soil erosion (Figs.5-7), removing of dead, dying, felled trees and stumps to rehabilitate the degraded forest areas as per detailed below:

Details of rehabilitated degraded forest areas

S. No.	Name of Locality (Forest Range)	Compartment No.	Area in Hectare
1	Ranjki (Lamni)	291 RDF	50
2	Chhuiha (Belgahana)	1165 RDF	20
3	Belpat (Khodri)	1300RDF	20
4	Keochi (Gaurela)	1213P	10

The rehabilitated area in all the above four ranges was visited by the committee. Stumps of sal dressed during rehabilitation of degraded forests were observed with coppice shoots (Fig. 8) in Compartment 1300 RDF at Belpat in Khodri forest range of the BR.

3. Fire line was created in compartments at Chhapparwa, Lamni, Achanakmar, Surahi, Khodri, Lormi and Kota forest ranges of Bilaspur and Marwahi Forest Divisions. Clear mark differentiation between fire line created and remaining untouched compartments were seen in most of the areas.

4. Purchase of 4 wireless handsets for communication in BR was completed. Out of four handsets, three sets are installed at Lormi, Achanakmar and Koni Forest Ranges and one on mobile vehicle of Director, Achanakmar-Amarkantak Biosphere Reserve. All the wireless sets are working satisfactorily.



5.

बिगड़े वनों के सुधार---बेलपत (खोड़ी परिक्षेत्र)



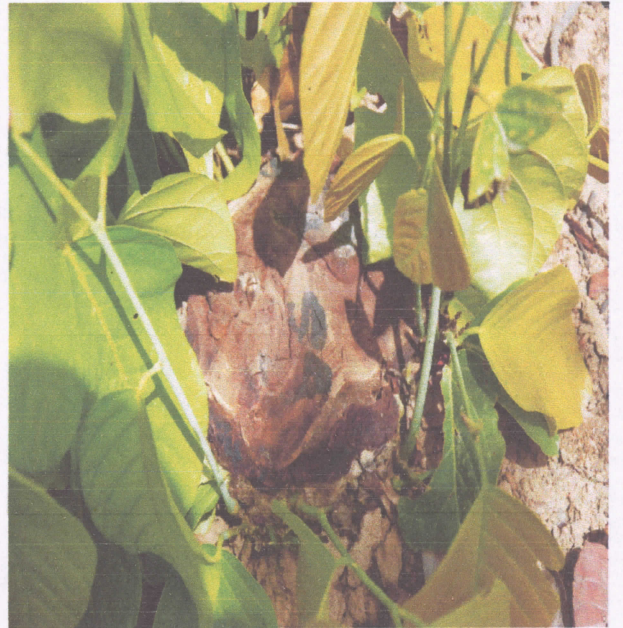
6.

बिगड़े वनों के सुधार---बेलपत (खोड़ी परिक्षेत्र)



7.

बिगड़े वनों के सुधार---रंजकी (लमनी परिक्षेत्र)



8.

बिगड़े वनों के सुधार---बेलपत (खोड़ी परिक्षेत्र)

B. Development of ecotourism:

1. Achanakmar and Lamni villages are situated on the border of core zone and buffer zone. Forest rest house or tourist huts have been constructed by BR authorities to encourage the tourists. The number of persons visiting the BR is increasing every year. The ecotourism is also providing jobs to the inhabitants. To provide more connectivity to tourist sites 2 tracks or approachable paths, each consisting of 5 km length have been constructed at Tangli pathar- Chauradadar (5 km) and Ranjki- Tanglipathar (5 km) (Fig. 9,10).
2. Besides this, nature trails have been developed at 4 localities viz. Tangli pathar, Jhojha, Sidhha tekari and Kotsagar (Fig.11,12). The area is now better approachable.

C. Eco-development to the inhabitants / Socio- economic upliftment of indigenous population/ local communities

1. BR authorities has given due consideration in the action plan to uplift the socio-economic status of inhabitants living in forest and revenue villages of core, buffer and transition zones by providing the fruit bearing seedlings. In all, 50,000 fruit bearing seedlings raised at Belgahana, Nawagaon nursery no. 2, Khodri, Belpat, Gaurela, Kota, Pendra and Bilaspur nursery no.2, were distributed at 17 localities of Belgahana, Khodri, Gaurela, Kota, Pendra and Bilaspur forest ranges to provide them livelihood. The details are as below.

Details of fruit bearing seedlings distributed free of cost to the villagers

S.No.	Name of forest range	Localities where seedlings distributed	Plant species distributed	No. of seedlings
1.	Belgahana	Bhelwatikri, Baheramunda, Lufa,	Guava, Jackfruit, Munga,	5000

		Lahngabhata, Charpara,	Kaju, Tamarind, Citrus, Custard apple, Aonla	
2.	Khodri	Villages under Khodri forest range		10,000
3.	Gaurela	Villages of Gaurela forest range		5,000
4.	Kota	Kota, Kotsagar, Khaichhitti, Amne, Khurdur, Tada		5,000
5.	Pendra	Villages of Pendra forest range		5,000
6.	Bilaspur	Devnagar Koni, Badi Koni, Imlibhata		20,000

The seedlings are growing well at all the localities with a few mortality.

2. Immunization / vaccination of cattle against major diseases at following villages within BR was done with the help of veterinary surgeon and his staff appointed by state forest department at Kanan Pendari Zoo. In all, 11,150 cattle were vaccinated (Fig.13) for khurpaka, muhpaka and tangiya diseases, besides treating them with anti-worm medicines.

Details of cattle vaccinated at selected villages

S.No.	Name of Village	Date of Camp	No. of cattle vaccinated
1	Pataita/Shivtarai	06.01.10	1900
2	Newsa/Kori	07.01.10	1350
3	Manpur/Saraipali	08.01.10	1650
4	Gobripar/Piparkhuri	09.01.10	1500
5	Parsada/Davanpur	10.01.10	1650
6	Litiya/ Mohtara	11.01.10	1500
7	Chhirhapara/Didolpara	12.01.10	1600



9. ट्रेकपाथ – टंगली पाथर (लमनी परिक्षेत्र)



10. ट्रेकपाथ – टंगली पाथर (लमनी परिक्षेत्र)



11. नेचरट्रेल---टंगली पठार (लमनी परिक्षेत्र)



12. नेचरट्रेल---कोटसागर (कोय परिक्षेत्र)

Camps were also organized in core, buffer and transition zones to see the status of human health residing in the area. Anti-malaria campaign was organized to control the spread of disease (Fig. 14).

D. Encouraging and supporting traditional agriculture

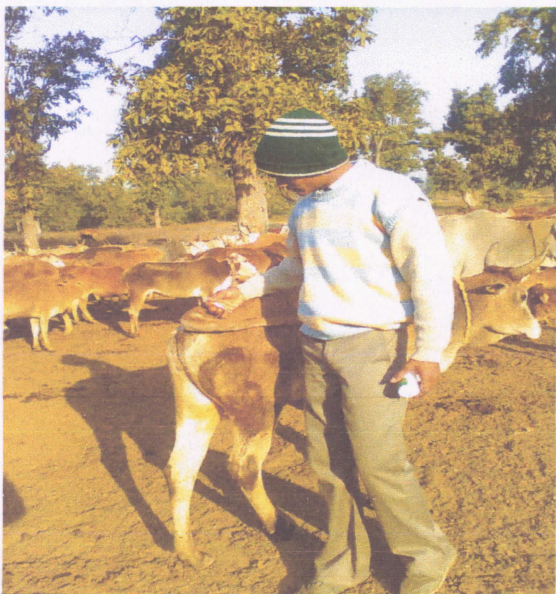
1. To develop confidence among inhabitants and to support them in their development, a community hall (Fig. 15a, 15b) was constructed at Surahi during 2009-10. It was inaugurated by Smt. Lata Vaishnav, Honorable Member of District Panchayat on 19.07.2010 and handed over to Forest Protection Committee, Surahi for their various traditional activities including supporting agriculture.

E. Income generation activities

BR authorities have constructed two ponds for pisci-culture at Bhootkachhar and Tilaidabra (Fig. 16, 17) during the year 2009-10. These ponds are being used by local communities living nearby for harvesting fishes for their day to day need. The wild animals also visit these ponds for drinking water. The peg marks of hyena, deers, and langur were observed during the present visit. The management of these ponds is being done by Forest Protection Committees of above villages.

Comments on work done under the Management Action Plan:

Government of India, Ministry of Environment and Forests, New Delhi sanctioned a Grant- in –Aid to Government of Chhattisgarh for Rs. 1,17,15,000/- to implement the Management Action Plan of Achanakmar-Amarkantak Biosphere Reserve for the year 2009-2010 as per details given in annexure I . The first installment of the Grant-in- Aid i.e. Rs. 72 lakhs was released to undertake the work of the BR in terms of relevant parameters. The authorities prioritized the activities as per annexure II keeping in mind the



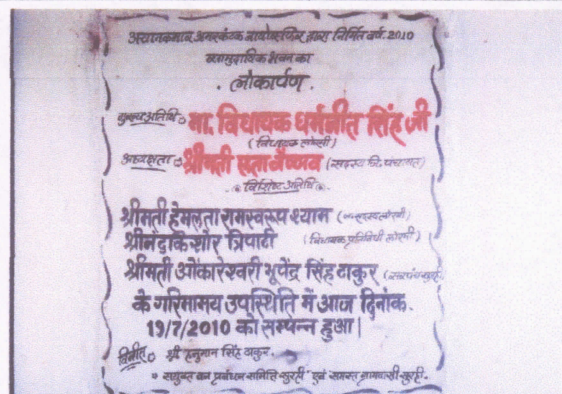
13. टीकाकरण कार्य 2009-10 ग्राम परसदा



14. टीकाकरण कार्य 2009-10 ग्राम परसदा



15 a. कम्प्यूनिटी हाल का निर्माण---सुरही (सुरही परिक्षेत्र)



15 b. कम्प्यूनिटीहाल का उद्घाटन



16. तालाब निर्माण, मछली पालन हेतु---तिलई डबरा (छपरवा परिक्षेत्र)



17. तालाब निर्माण, मछली पालन हेतु---भूत कछर (सुडिया परिक्षेत्र)

terms & conditions of the grant sanctioned. The additional conditions also kept in mind for preparation of baseline data in annexure II are:

(a) Floral and faunal diversity with emphasis on endemic and rare, endangered and threatened (RET) species and their habitats.

For preparation of baseline data in terms of floral and faunal diversity, the Biosphere authorities distributed the seedlings of some threatened plant species like Aonla along with fruit bearing and other forest trees. To improve the habitat of threatened fauna 100 ha degraded forests have been improved and 1.5 lakh seedlings of custard apple, jamun, tamarind, guava, bamboos, khamer and teak were planted with the help of villagers.

(b) Soil and Moisture condition, ground water and hydrological conditions.

Construction of soil bunds with the help of gravels and broken tree branches to prevent soil erosion in degraded forests, digging of two ponds, have definitely helped in soil and moisture conservation and hydrological conditions of the area.

(c) Constituents affecting the health of habitants.

The BR authorities have organized camps for the health of inhabitants and their cattle in some of the remote forest villages of the BR where no medical facilities are available.

(d) Socio-economic conditions of the indigenous population including identification of families dependant on forest resources for their livelihood.

Threatened forest resource species Aonla, often collected by inhabitants from the BR, is identified by the authorities to be encouraged for plantation in the village land of the inhabitants to prevent them to go forests for its collection. The authorities have distributed Aonla seedlings besides fruit trees to the

inhabitants of seven forest ranges. Success in implementing this idea may help to think in distributing seedlings of other threatened species.

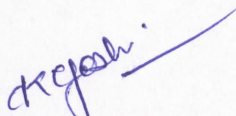
(e) Existing services and infrastructure including interpretation center for educating stakeholders.

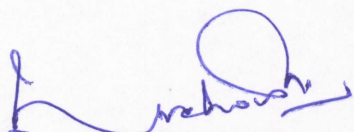
The state forest department has initiated work to educate stakeholders by providing them training on different forestry aspects. Release of the second installment of the grant for next year will enhance the developmental activities.

Recommendations

The Grant-in-Aid released by Government of India, Ministry of Environment and Forests, New Delhi has been fully utilized by the BR authorities for the activities it was sanctioned. The remaining amount should also be sanctioned immediately, so that the left over approved activities could be initiated.

The funding agency is also requested to convey the sanction of Management Action Plan to the implementing agency at least in the first quarter of the financial year, so that the sanctioned physical and financial targets could be achieved fully during the financial year.


(Dr. K.C. Joshi)


(Dr. N. Roychoudhury)

Annexure-I

S. No.	Type of work	Location	Rate	Amount allocated for year 2009-10	Central Share
1	2	3	4	5	6
I	Protection of Biosphere Reserve				
(i)	Biosphere Reserve visits, Seminars/Workshops	-	LS	2.00	2.00
(ii)	Purchase of wireless set/Handset & Networking/communicating equipment – 2 No.	Bilaspur, Achanakmar, Lamni	0.50	1.00	1.00
(iii)	Conducting meetings of stake holders – 10 No.	Chhapparwa, Khodri and Lormi	0.10	1.00	1.00
(iv)	Rehabilitation of degraded forest – 100 ha.	Ranjaki, Chhuiya, Belpat, Keochi	0.20/ha.	20.00	20.00
II	Fire Protection				
(i)	Creation of Fire Lines – 1 No. 500 Ha.	Chhapparwa Lamni, Achanakmar, Khudia, Khodri, Gorela, Lormi, Kota, Belgahana	0.01/KM	5.00	5.00
(ii)	Engaging Fire Gornigs 2500 Ha.	Chhapparwa Achanakmar, Lamni, Khudia, Khodri, Gorela, Lormi, Kota, Belgahana	0.001	2.50	2.50
(iii)	Development of Nurseries – 1 No.	Nawagaon	5.00	5.00	5.00
(iv)	Raising & Distribution of Plants – 150000 No.	Nawagaon Kota, Bilaspur, Pendra, Khodri, Keochi, Lormi	0.0001	15.00	15.00
III	Development of Eco-Tourism				
(i)	Support to tourist guide Eco-Development Committee for participation of local communities – 1 No.	Achanakmar	3.00	3.00	3.00
(ii)	Development of Track Paths – 10 Km.	Ranjki Tanglipathar	0.05/Km	5.00	5.00

		(6 Km.) Tanglipathar- Chauradadar (6 Km.)			
(iii)	Development of Nature Trails – 4 No.	Tanglipathar, Jhojha, Siddhatekari, Kotsagar	0.50	2.00	2.00
IV	Eco-Development/Socio Economic Upliftment of Local Communities : Social Welfare Activities				
(i)	Distribution of Solar lantern & other Solar Equipments to remaining beneficiaries – 20 No.	Belgahana, Achanakmar, Lamni, Chhapparwa, Khodri, Pendra, Lormi, Khudiya	0.10	2.00	2.00
(ii)	Distribution of fruit bearing seedlings to remaining beneficiaries – 50000	Nawagaon Kota, Bilaspur, Pendra, Khordri, Belgahana, Belpat, Madana	0.0001	5.00	5.00
(iii)	Immunization/Vaccination of cattle	All the cillages in BR	LS	2.00	2.00
(iv)	Conducting Medical Camps	-	LS	1.00	1.00
(v)	Conducting extension camps in tribal settlements -20 Camp	All the tribal settlements in the BR	0.25/ Camp	5.00	5.00
(vi)	Construction of new Dug well – 10 No.	Karka, Salka, Jogipur, Bahramuda, Achanakmar, Lamani, Chhapparwa, Belpat, Khodri, Keochi	1.00	10.00	10.00
(vii)	Construction of new Field Channels – 2000 No.	Bahramuda, Karka, Rajak, Nawapara, Jhiria, Khudiya, Panwari	0.00050 cubic meter	1.00	1.00
V	Encouraging & Supporting Tradition agriculture				
(i)	Construction of Bio-Gas Plants – 5 No.	Amagohan Achanakmar, Lami, Chhapparwa, Lormi,	0.25	1.25	1.25

		Khudiya, Belpat			
(ii)	Construction of one Community Hall – 1	Surahi	5.00	5.00	5.00
(iii)	Providing sanitary Facility – 4 No.	Bankal, Chhirhatta, Kori, Pataita	0.1	0.40	0.40
VI	Income Generating Activities				
(i)	Collection & Processing of Mahul Leaves – 2 Unit	Khudiya, Khodri	0.50/ unit	1.00	1.00
(ii)	Construction of two ponds for pisciculture – 2 No.	Bhutkachhar, Tilaidabra	3.00	6.00	6.00
(iii)	Promotion of Lac-Culture – 100 Unit	Pendra, Kota, Pataita, Chhuiya, Ataria, Lamni, Keochi	0.03/ unit	3.00	3.00
(iv)	Collection and Processing of Honey – 1 No.	Keochi	2.00	2.00	2.00
(v)	Training in driving, woodwork, electric work, cooking etc. – 10 No.	Belgahana, Achanakmar, Lamni, Chhapparwa, Khodri, Pendra, Lormi, Khudiya	0.1	1.00	1.00
VII	Research & Monitoring : Education & Training				
(i)	Monitoring & Evaluation	-	LS	2.00	2.00
(ii)	Conducting Nature Awareness Camps for School/ College Students – 20 No.	Bilaspur, Belgahana, Kota, Achanakmar, Lamni, Chhapparwa, Khodri, Pendra, Lormi, Khudiya	0.10	2.00	2.00
(iii)	Conducting Nature Awareness Camps for local communities – 20 No.	Bilaspur, Belgahana, Kota, Achanakmar, Lamni, Chhapparwa, Khodri, Pendra, Lormi, Khudiya	0.10	2.00	2.00
(iv)	Training of Field Officers & Staff	-	LS	3.00	3.00
(v)	Meeting	-	LS	1.00	1.00
	Grand Total			117.15	117.15
	Release Amount			-	72.00

**EXPENDITURE STATEMENT FOR FUND RELEASED DURING 2009-10
UNDER THE BH – ACHANAKMAR-AMARKANTAK BIOSPHERE RESERVE**

Sl. No.	Item of work	Unit	Rate Rs./ Unit	Physical Target	Financial Target (in lakh)	Physical Achievement	Financial Achievement	Location
I	2	3	4	5	6	7	8	9
I	PROTECTION OF BIOSPHERE RESERVE							
1.	REHABILITATION OF DEGRADED FOREST	Ha.	0.20/Ha	100	20.00	100	1999806	Chhuiha, Belpat, Keochi, Ranjaki Lamni
II	FIRE PROTECTION							
1.	CREATION OF FIRE LINES	Km	0.01/Km	500	5.00	500	499788	Chhapparwa, Lamni
2.	DEVELOPMENT OF NURSERIES	No.	5.00	1	5.00	1	499989	Nawagaon
3.	RAISING & DISTRIBUTION OF PLANTS	No.	0.001	150000	15.00	150000	1499908	Nawagaon, Khodri, Keochi, Lamni, Kota
III	ECO-DEVELOPMENT / SOCIO-ECONOMIC UPLIFTMENT OF LOCAL COMMUNITIES							
1	DISTRIBUTION OF FRUIT BEARING SEEDLING	No.	0.001	50,000	5.00	50,000	499939	Belgahna, Belpat, Nawagaon, Madna, Kota.
IV	DEVELOPMENT OF ECOTOURISM							
1	DEVELOPMENT OF TRACK PATH	Km	0.05/Km	10 Km	5.00	10	498936	Tangli pathar
2	DEVELOPMENT OF NATURE TRAILS	No.	0.50	4	2.00	4	199712	Tangli pathar, Sidda takri (Jhojhha), Khodri, Kotsagar (Kota)
V	INCOME GENERATING ACTIVITIES							
1	CONSTRUCTION OF TWO PONDS FOR PISCICULTURE	No.	3.00	2	6.00	2	597878	Bhutkachhar, Tilaidabra
VI	ECO-DEVELOPMENT / SOCIO-ECONOMIC UPLIFTMENT OF LOCAL COMMUNITIES							
1	IMMUNIZATION / VACCINATION OF CATTLE	LS	-	-	2.00	-		Sivtrai, Newsa, Pataita, Kori, Gobnpat, etc.
2	CONDUCTING MEDICAL CAMPS	LS	-	-	1.00	-	299701	
VII	ENCOURAGING & SUPPORTING TRADITIONAL AGRICULTURE							
1	CONSTRUCTION ONE COMMUNITIE HALL	No.	5.00	1	5.00	1	499931	Surahi
	PROTECTION OF BIOSPHERE RESERVE							
1	PURCHASE OF WIRELESS SET / HAND SET & NETWORKING / COMMUNICATING EQUIPMENT	No.	0.50	2	1.00	-	99996	O/C A A B R Bilaspur
	Total -				72.00		7195606	



• Sihawal Sagar lake at Achanakmar in core zone for water conservation