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## Ecotourism Development and Security Restructuring: A GI Based Planning for Peaceful Dissuasion of Anarchism in Forest Provinces of India

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### Abstract

Ajodhya Hill in Purulia district of West Bengal is a treasure house of natural beauties, but hilly terrain and thick forest cover have made many parts of this region inaccessible by road and perpetual agricultural drought over decades had weakened the economy of the area. Taking advantage of this physical and economic handicap, an organized group of social and political activists called Left-Wing Extremists (LWE), perpetrating violence and keeping the people of this region under threat. Non-cooperation of local population being the prime obstacle, government security forces with all its intelligence network and muscle power had not been utterly succeed to stop these activities. This UGC (University Grant Commission - Govt. of India) sponsored '*Minor Research Project*' plans for economic and social stabilization of this region through the promotion of alternate economic practices for underprivileged forest dwellers and involving them in anti-terrorism operations. Taking into account the severity of physical environment and minimum skill level of tribal people, implementation of '*Ecotourism*' in these forest villages seems to be the most suitable income-generating and ecologically permissible activity. Due to essentially spatially distributed nature of tourism and terrorism related data and need of various types of spatial and statistical analysis GIS has proven to be a successful means in this study and based on spatial, non-spatial and attribute data overlay ('*Weighted Sum Overlay Analysis*' - ARC-GIS 9.2), ecotourism potential zones were identified. The inputs in the form of arc-coverages were assigned relative weightages according to their influence/importance in ecotourism development. Cadastral level action plan maps have been prepared for ecotourism infrastructure development and sustainable land use practices. Spatial database created on last ten years extremist movements and terrorist attacks to identify the spatial pattern, association and causes of vulnerability of the hot spots. Lastly spatial decisions have been made for allocation and relocation of police out posts, military camps and local participatory groups for fast information transfer and rapid action against any kind of social disorder.

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## 1. Introduction

In contemporary world extremist movements and terrorism are the biggest threat to the human civilization. In most of the cases the birthplace of these extremist groups are the most backward and inaccessible part of a nation, where physical austerity has impede the development of agriculture, industry and transport network and made the region economically and socially backward. Thus poverty and ignorance among local population sometimes help the extremist groups to prosper more rapidly and effectively. To get the support and involvement of the local people in anti-terrorism operations, the administration first should strive to alleviate poverty of the region by arranging income-generating programs. Economic uplift automatically brings social awareness, and people spontaneously act against any kind of anarchism, which may come across the way of their earnings.

The forest provinces of Indian Plateau are full of natural attractions but the physical environment of this region is not suitable for intensive agriculture. The unskilled tribal people of these regions are also not preferred by the modern industry. Thus considering their low skill level as well as the environmental regulations, implementation of 'ecotourism' in forest villages may be the most suitable income-generating activity. Since 'ecotourism' has been defined by the Ecotourism Society in 1992 as "purposeful travel to natural areas to understand the cultural and natural history of the environment, not altering the integrity of the eco-system, while producing economic opportunities that make the conservation of natural resources financially beneficial to local citizens" [1]. The volume of manpower could be engaged in tourism related activities is one of the highest in the service sector, which can create a wide range of job opportunities for millions of people with minimum skill level.

## 2. Study Area

Ajodhya Hill (23°05'32"N-23°20'30"N, 85°55'00"E-86°14'20"E) in Purulia District of West Bengal is a part of the 'Jungle Mahals', i.e. tropical dry deciduous forest of Chotonagpur Plateau Region and mostly inhabited by tribal population. 176 Mauzas (villages) of Jhalda-I, Jhalda-II, Arsa, Baghmundi and Balarampur Block of Purulia share the 408.53 sq.km hilly tracts of Ajodhya (Fig-1). Undulating topography and dense forest cover of this region are responsible for its surface inaccessibility and thus lacking in medical and educational facilities. Though the climate of this region is not very harsh (annual average rain fall is 1286 mm, with annual mean temperature 26°C) but infertile laterite soil (originated from granite-gneiss of oldest precambrian or archean formations) with high evaporation and infiltration losses caused agricultural drought, which accumulated over years and had damaged the economy of the area. In "Integrated Mission for Sustainable Development"-1993 Govt of India identified 152 districts of India as backward district, and Purulia District was one of them [2]. Making use of this physical and economic constrain, an organized group of social and political activists called Left-Wing Extremists (LWE), compelling local people to take part in their anti government insurgency. Left-Wing Extremism (LWE) was described by The Then Chief Minister Buddhadev Bhattacharjee in 2005 as "plagued by the collapse or absence of rural governance" [3].

Aside these socioeconomic hostilities, Ajodhya Hill is blessed with natural marvels. It has a blend of steep mountains, splendid waterfalls, dense forests with her wildlife beauties and huge water bodies (reservoirs). In the year 2006 Ajodhya hills has been declared as "Conservation Reserve" at state level by the State Wildlife Board [4]. There is a huge potentiality of development of ecotourism in this 'only hill station' of South Bengal but inadequate infrastructure for transportation and accommodation, and dominance of Left-Wing Extremists (LWE) in Purulia district, have made this region lagging behind other tourist destination of South Bengal.

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