

# Rewarding Community Participation in Managing Environmental Services Provided by a National Park

## A case study of Doi Inthanon National Park, Chiang Mai, Thailand

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### INTRODUCTION

This study conducted in northern Thailand in association with the Rewarding the Upland Poor for Environmental Services (RUPES) project. The RUPES project has been assessing experience with efforts across Asia to test mechanisms for providing rewards for poor upland communities who provide stewardship for natural resources that provide important benefits to downstream and larger national to global societies. Doi Inthanon National Park (DINP) is a well known and very ecologically diverse provider of environmental services that also has spiritual and historically symbolic significance in the Kingdom of Thailand. Thus, DINP is a prominent feature of the very extensive reserved forest lands and still expanding protected area system that within the last 50 years has come to dominate land use in northern Thailand, and especially its Chiang Mai province. As its natural teak timber stocks have been logged to exhaustion, and opium revenues vanished after it was outlawed and eradicated, environmental services still retaining attention of national policymakers now include watershed functions, biodiversity, and scenic beauty that can attract tourism, with perhaps some as yet still unclear interest in carbon stocks. Thus, the state is seeking to rapidly expand Thailand's protected area system (PAS) to have high ecological connectivity in its coverage of all upland and highland portions of river basin watersheds in especially the upper north region of the Kingdom.

### RESEARCH OBJECTIVE

To explore the potential for future work with an important national park in Thailand related to mechanisms for rewarding local communities helping provide stewardship for its natural resources. Initial interest focused on a mechanism that now provides funds to elected local sub-district governments near the park, based on a percentage of revenues collected by the park from visitors. With this starting point, the study became a more general exploration of how Payment for Environmental Services (PES) concepts and mechanisms are or might be useful for national park management at DINP.

### RESULTS AND DISCUSSION



Figure 1 Natural and cultural diversity in Doi Inthanon National Park

Table 1 Project activities seen as “rewards” for local communities

Project / Activity	Support operation agency	“Rewards”
<b>A. Direct benefits from access or livelihood opportunity (real impacts on income &amp; returns to labor?)</b>		
Development of infrastructure: roads, irrigation system, and electricity supply	Royal Irrigation Department, Tambon Administrative Office, Land Development Department	improved access to transportation, water, and energy
Coffee production	Royal Project	potential income from agriculture livelihood opportunity
Organic vegetable project	Royal project, Mae Klang Watershed Management Unit, and Inthanon National Park Office	potential improved income and food supply from agriculture livelihood opportunities
Rainbow Trout Fish Project	Fisheries Department	potential income from aquaculture livelihood opportunity
Training Loca Guide	Doi Inthanon National Park Office	improved skills for potential ecotourism livelihood opportunities
<b>B. Potential benefits from awareness, concepts, ideas, knowledge (education cum indoctrination?)</b>		
Exchange of knowledge - a study visit in the community and outside communities	Thailand Research Fund	Acquisition of knowledge to help develop their own village
Ecotourism or Community Based Tourism (CBT)	Thailand Research Fund, Doi Inthanon National Park Office	Village enterprise based on conserving natural resources, traditional culture, and livelihoods
Environment and Natural Resources Youth Camp	Doi Inthanon National Park Office	Camping experience, ideas & knowledge for youth & their role in conserving soil, water, forest ecology, wildlife, & environment
<b>C. Indirect benefit from environmental context &amp; less conflict (+cost-sharing or labor compensation?)</b>		
Forest Restoration Project	Doi Inthanon National Park Office, Royal Project, Upper Mae Klang Watershed Network, and Mae Klang Watershed Management Unit	Increasing forest area and biodiversity (any cost-sharing or labor compensation?)
Fire buffer zone	Doi Inthanon National Park Office, Upper Mae Klang Watershed Network, and Mae Klang Watershed Management Unit	Forest protected from fire (any cost sharing or labor compensation?)
NRM & environment activities: fire buffer zone, aquatic conservation area, cleaning village, improving water ecosystem (dam, tank, etc.)	Upper Mae Klang Watershed Network under Mae Klang Watershed Management Unit, Royal project, Doi Inthanon National Park Office	Conserved and improved water & watershed “ecosystem” (any cost-sharing or labor compensation?)
Land development projects	Land Development Department	Sustainable land use promotion (?)

The basic nature of the approach here is to seek development of a real market-based mechanism to mediate relationships between the community-based service providers and the service buyers (tourists) (Figure 2). Appropriate supporting and co-investment roles can then be identified for the park and other institutions, including initial infrastructure and human resource investments, as well as monitoring and assessment of the real impacts of the approach and mechanisms on both the environmental services provided by the park and the livelihoods of households and communities employed by the system. Efforts under government-supported programs conducted by the Royal Project, the Thailand Research Fund (TRF), and academic institutions such as Chiang Mai University (CMU), Maejo University (MJU) and Kasetsart University (KU) have sought to help DINP enclave communities develop livelihood elements such as new cash crops, fruit trees, agricultural technology, household marketing, handicrafts, and environmental conservation (Table 1). But all these efforts have faced serious constraints, and many enclave villagers claim park officials still do not understand their livelihoods and related problems. It is perhaps instructive that after many years these supporting institutions are now converging in recommending exploration of community-based ecotourism as an important way forward. Moreover, potential development of tourism becomes even more attractive when considering the increasingly dramatic lack of alternative livelihood opportunities particularly for ethnic minorities in mountainous areas of especially the upper north region of the Kingdom. And DINP has responded by launching a pilot case study of community-based eco-tourism with both environmental and cultural dimensions.

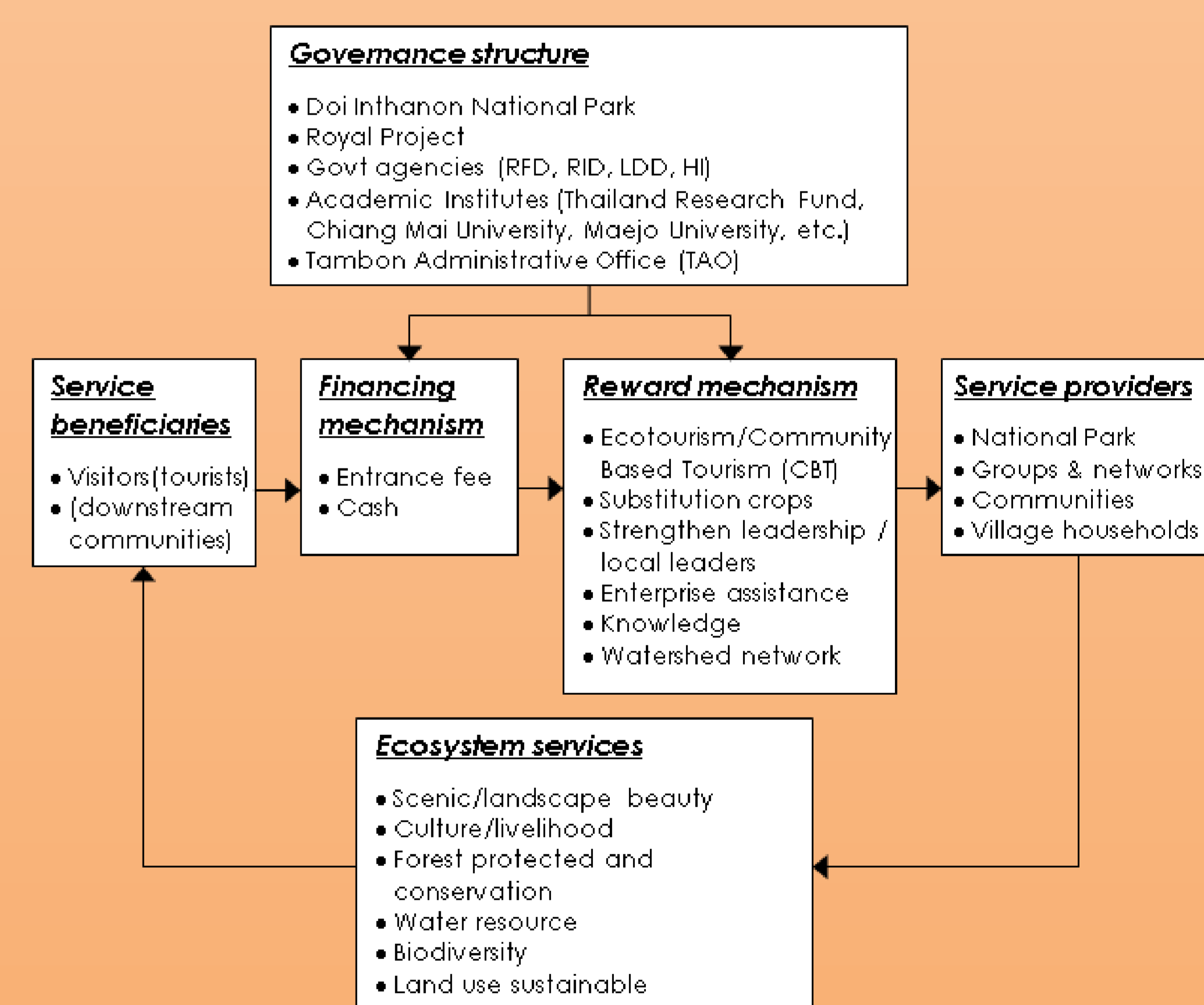


Figure 2 PES-like rewards for environmental service as perceived by DINP Office

### NEXT STEP

The most interesting and promising area for potential further exploration of PES-like mechanisms and activities at DINP clearly appears to be work related to further development of ecotourism. It is particularly striking that our study found a clear convergence of interests and recommendations for future directions from DINP leadership and officials, from local communities and village leaders, and from supporting institutions that have been working with various lines of project activities within DINP for several to many years. Indeed, the DINP pilot case study has already begun under supportive park policies that have already been announced, and there seems to be substantial enthusiasm from all key actors. But given the current description and portrayal of their approach as indicated in Figure 3, there are still substantial ambiguities and issues that will need to be resolved.

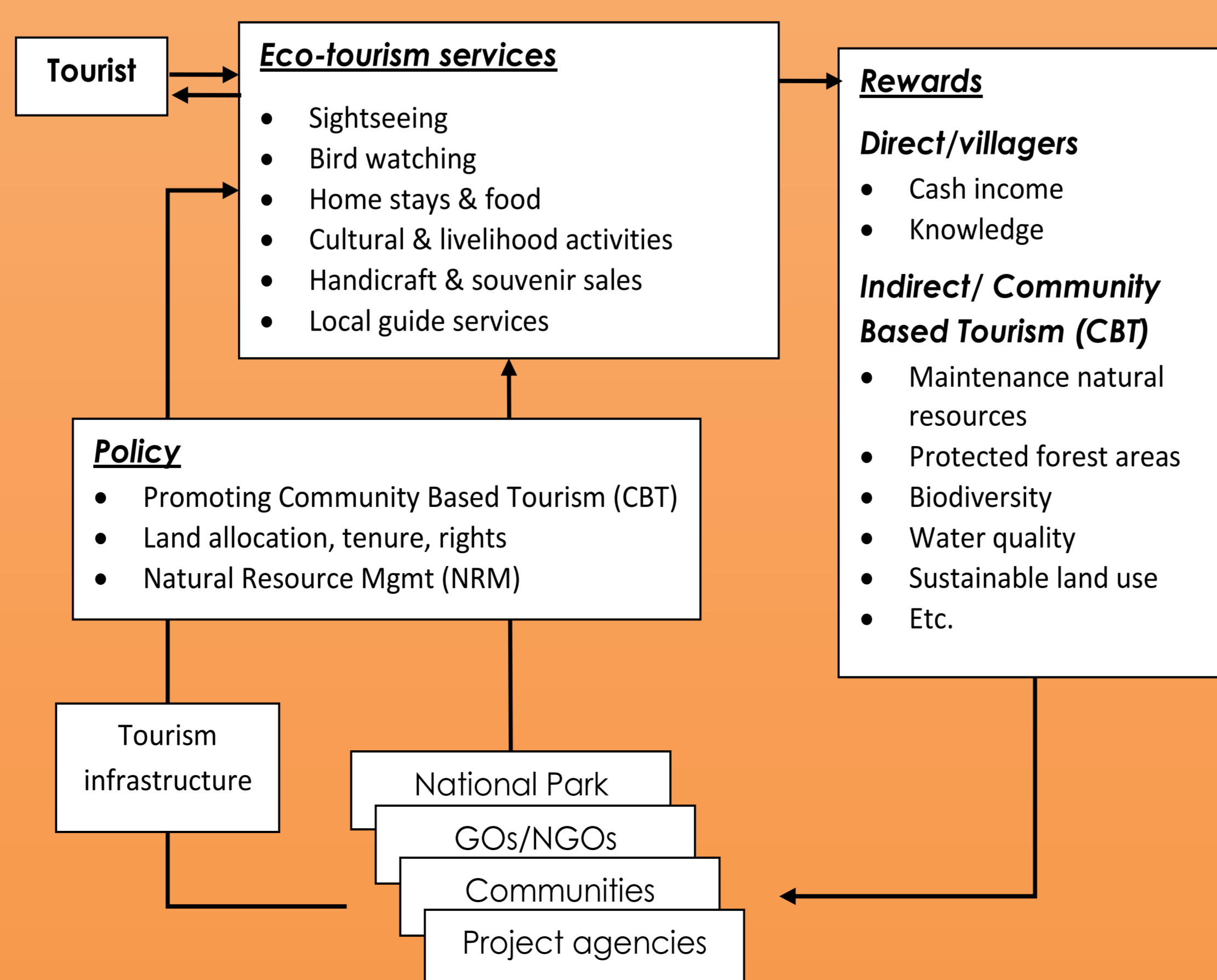


Figure 3 DINP perceptions of PES-like aspects of ecotourism



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