Supporting Ecotourism through Sustainable Forest Management (SFM)

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ABSTRACT

The conservation, sustainability and poverty alleviation are the main challenges that facing developing countries. To meeting these three issues, it is highly required to involve local community in the decision making process when managing forests or any local resources. This study aims to identify the role of neighborhood communities around Dibeen and Ajloun forests in the forest conservation activities and to how much they believe of ecotourism as a vehicle for management and economic development to make a base for governance approach in that area. The results show no role for local communities in the management process, and the respondents believe that neither local community nor municipalities are capable of managing the forests. However, they think that local communities should be prepared to be involved in managing the forest. The majority agreed on tourism enterprise as the best investment opportunity on these forests.

Keywords: Ecotourism, Sustainability, Governance, Environment, Local Community Introduction.

INTRODUCTION

Jordan's environment is under serious threat due to drought (Hadadin & Tarawneh, 2007). The productivity of forests is declining due to climate change, successive droughts, poor management and man misuse (MoE, 2013). Although Jordan is making some progress in conserving environmental resources and establishing protected areas, much more remains to be done, to improve and conserve the country's rangelands and forests (Al Ouran, 2010).

While the government of Jordan has a national strategy to combat desertification, a national biodiversity strategy, and a national policy for protected areas, it does not have an official policy for the protection of Jordan's forests. Although a draft policy document on forests was formulated in 2007, it was never adopted or submitted to stakeholders for discussion.

Jordan has limited forest resources, with about only 1% of the country classified as forests. These forests are generally neither productive nor capable of producing good quality wood for commercial or industrial purposes. However, they provide other kinds of important services, including contributions to soil conservation, watershed management, aesthetic and recreational value, biodiversity conservation and carbon fixing (FAO, 2010).

The main constraints affecting forests are: the limited availability of water, overgrazing, cutting of trees and shrubs for fuel use, weak rehabilitation and management programs, poor livestock management, lack of pertinent information, a low level of community participation, and insufficient coordination between different organizations and stakeholders. It is therefore imperative for Jordan to work now toward adopting a national forest policy as national environmental priorities (MoE, Fifth National Report on Biodive, 2014).

The Sustainable Forest Management (SFM) technique is a good example that can be used through a governance approach. A governance approach is needed, allowing all stakeholders to be informed and offer input (Price &

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Isaac, 2012).

Sustainable Forest Management (SFM) techniques are being advocated to ensure that management practices maintain and enhance the economic, ecological and social values of forests for the benefit of present and future generations. According to the Food and Agriculture Organization (FAO, 2002), SFM is "the stewardship and use of forests and forest lands in a way that maintains their biological diversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological economic and social functions, at local, national and global levels, and that does not cause damage on other ecosystems."

The General Assembly of the United Nations adopted in December 2007 the most widely, intergovernmental agreed definition of Sustainable Forest Management (SFM): Sustainable forest management as a dynamic and evolving concept aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations. It is characterized by seven elements, including: (i) extent of forest resources; (ii) forest biological diversity; (iii) forest health and vitality; (iv) productive functions of forest resources; (v) protective functions of forest resources; (vi) socioeconomic functions of forests; and (vii) legal, policy and institutional framework (Source: UN 2008, Resolution 62/98).

The Royal Botanic Garden (RBG), a Jordanian NGO that aims to be a center for public education, scientific research, and conservation efforts in Jordan, (RBG, 2011). One of its important missions in this domain is to educate locals about proper environmental management. RBG has experience working to resolve environmental issues using governance approach that give local people and other NGOs a say in the development of activities that benefit local communities.

The purpose of this study is to investigate the current situation of forest management in Dibeen and Ajloun from the local communities' point of view and the best use of forests in the study area for eco-tourism activities. The outcomes of this study will help to:

- Best manage and protect the forests in the study area using the participatory approach
- Provide decision makers with data updates that will facilitate the adoption of Sustainable Forest Management (SFM)
- Build capacity of NGOs, local community, and government agencies of best forest management practices
- Apply forest-based eco-tourism project for poverty reduction, which does not currently include such policies.

Importance of Ecotourism for Economic Development

An increasing attention has been paid to the regional economic development worldwide. Economic development aims to improving welfare of people through creating jobs, and generating additional income. This process depends on the interaction between four factors (Michael, Liu, & Liu, 2013): First: resources such as; infrastructures, population, skills, technology. Second the mobility of the resources which depends also in institutional and social relations. Third: the extent of transfer of wealth between wealthy and poor regions. Fourth: Developments are a cumulative processes, development promote additional development.

In recent years the demand for ecotourism destinations has become a major force in the global tourism, (UNEP, 2013), the World Tourism Organization annual reports (2006, 2008, 2014), worldwide arrivals witness growing between 5.5% in 2006 and 4.3% in 2014. The total contribution of the tourism sector in the global economy reached the (US\$7 trillion) and (266 million) jobs in 2014. These numbers are estimated to reach (US\$10 trillion) and 305 million jobs in 2024, (WTTO, 2006,2008,2014), According to the US Department of Housing and Urban Development (2004); Tourism could be used as an economic development tool designed to attract visitors to an area based on the unique aspects of the locality's history, landscape and culture."

Ecotourism: A concept which covers a wide range, from immaculate nature to more or less degraded habitats, it serves as a tool for conservation and sustainable development of local communities. The IUCN definition is (IUCN, 2004): "Ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations". The International Ecotourism Society defines ecotourism as 'Travel to natural areas that conserves the environment and sustains the well-being of local people' (Society, 2009).

There are a numerous definitions of ecotourism, each one of them sees the concept form different prospective, the following table includes 6 different definitions starting from 1965 to 2015

Researcher	Definition	Year	Source
The International Tourism Society (TIES)	responsible travel to natural areas that conserves the environment, sustains the well- being of the local people and involves interpretation and education	2015	https://www.ecotourism.org/news/ties- announces-ecotourism-principles-revision
Cristina	Ecotourism involves visiting natural areas with the objectives of learning, studying or participating in activities that do not bring negative effects to the environment; whilst protecting and empowering the local community socially and economically	2004	Cristina (2004) Definition of ecotourism. Journal of Sustainable Ecotourism Management 45, 123-128
Megan Epler Wood	responsible travel to natural areas that conserves the environment and sustain the well being of local people	2002	http://www.pnuma.org/eficienciarecursos/do cumentos/Ecotourism1.pdf
FAO	ecotourism is tourism and recreation that is both nature-based and sustainable	1997	Food and Agriculture Organization of the United Nations
Ceballos lascurain	Traveling to relatively to undistributed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestation (both past and present) found in these areas	1987	Diamantis, 2004, Ecotourism: Management and Assessment, Thomson.
Hetzer W	lowest possible impact environment, respect for the host culture, increase benefits to local people and increase tourists' satisfaction	1965	file:///C:/Users/Owner/Downloads/44-519-1- PB%20(1).pdf

Table (1)Concepts of Ecotourism

The main components and issues that should be considered in any ecotourism project are: nature, local community, economics, conservation, culture, and interpretation. Community-based ecotourism (CBET) means different things to different people.

In Jordan, the concept of sustainable development of natural resources was recently introduced. In part, this concept was realized by the different governmental agencies and non-governmental organizations to improve the socio-economic status of inhabitants living near nature reserves, protected areas and archeological sites. For example, the Royal Society for the Conservation of Nature adopted this strategy of partnership with the local people in Dana Nature Reserve, southern Jordan, and yielded a successful model to be followed and applied elsewhere (RSCN, 2014)

This study focuses on how eco-tourism projects can be linked to protected areas in Ajloun and Dibbin through focusing on their comparative advantages and uniqueness. The study highlights how local community, government agencies, and private sector can develop their ecotourism potential in the targeted area, by implementing a sustainable tourism model.

The Strong ecological and cultural diversity in the targeted areas, the growth in tourism trend which will increase the opportunity for sales in the local tourist markets and enhance the reputation and promotion of Ajloun and Dibbin, the availability of natural raw materials and unemployed people interested in training and production, are all advantages that can be employed for the benefit of eco-tourism in the region. While Lack of skills, thus requiring extensive training, limited capital available for purchasing equipment, training expenses, setting up a business, and developing markets, thus requiring substantial financial and technical assistance from outside the company in order to start the business and bring it to a profitable stage, represents the challenges facing eco-tourism activities in the region.

Study Area:

Ajloun governorate settled in the north of Jordan,

occupying over 420 km2 (accounting for 2.3 % of the total country area). It has a population of over 146,000 (Goussous & Hadad, 2014).

The Ajloun area is one of Jordan's most beautiful regions, famous for lush vegetation, thick green forests, traditional village landscapes and sites of antiquity that rank among the best in the Middle East (RMW, 2013). Ajloun encompasses some of Jordan's most scenic green landscapes, with pine and oak forests and deep valleys. Only an hour's drive from Amman, the area also boasts much biblical history (Siyaha, 2013). visitors can reach Ajloun from the capital of Amman, Jerash or from Irbid city



Figure (1) The map of Ajloun governorate, MoT,2014

Table (2) The distribution of areas in Ajloun

region Source	•	(MoI	2013)
region.source	٠	(IVIUI,	201 3)

No.	Surfaces	Areas (Dunums)	Ratio %
1	Woodlands area	140240	33.2%
2	Owned lands areas	280625	66.4%
3	Treasury lands area	1760	0.4%

Ajloun Reserve established in 1987, it covers an area of 13 km2 located in the Ajloun highlands north of Amman. It consists of Mediterranean-like hill country, ranging from 600 - 1100 m above sea level, with a series of small and medium winding valleys. Several types of trees and shrubs grew in the area, throughout the years; these trees have been important to the local people for their wood and quite often for their medicinal and nutritional value or simply as a food source. In addition, the area is incubate wide variety of wild animals. In 2000, Ajloun Forest Reserve was announced, by Bird Life International and RSCN, as an Important Bird Area in Jordan.

Dibeen Reserve located within Jerash governorate; The entire forest of Dibeen extends over an area of 60 km2, varying in altitude from 500m to 1000m above sea level covering an area of pristine pine-oak habitat (*Pinus* halipensis-Quercus calliprinos). These Aleppo pines are some of the oldest and largest in the Kingdom.

Dibeen was ranked as the top priority site for conservation in the 1998 Protected Areas review, Dibeen is one of the best remaining examples of the original pine-oak forest cover in the region and supports at least 17 threatened species, like the Persian Squirrel, and other globally significant biodiversity.

Data and Method

This study seeks to provide sight into implementing the governance approach in order to reach the best management practices of the forests in Ajloun and Dibeen to improve eco-tourism activities in the targeted area. Data used in the analysis were collected by RBG researchers in 2014 through a questionnaire and direct contact with the targeted group. Specialists at the RBG visited official members and randomly selected participants were asked to answer a series of 42 questions mainly about their participation in the decision making that related to the forests and the protected areas management, and their knowledge of eco-tourism and potential of using the protected areas as assets for economic development through eco-tourism activities

The survey instrument was developed to address the study objectives, a total of 112 usable surveys were collected. At least 100 questionnaires applied on targeted respondents from the Forestry Department, RSCN, interested environment NGOs, and local communities from Jarash and Ajloun Governorates. The study focused on the local community around Dibeen and Ajloun forest. For Ajloun, the data collected from Um al Yanbe', Rasoon, Ba'oon, Orjan, Attearah, and Mehna. from Dibbin, the study include: Burma, Al Majdal, Al Jazazah, Dibbin, Sakeb, Nahlah, and Najdah. Table 2 represent the regional distribution of the data.

The Statistical Package for the Social Sciences (SPSS) was used for data analysis. Frequency and mean summary statistics were developed for all variables.

Results

Table 3
Ouestionnaires Distribution

e e						
Area	Locals	Municipality	Government	Locals organization	Visitors	Total
Ajloun	21	6	8	6	10	51
Dibbin, Jarash	21	4	7	13	16	61
Total	42	10	15	19	26	112

Demographic profile of respondents

The proportion of male (83%) and female (17%) Table 2. Respondents between the ages of 26 and 45 dominate.74.5% the sample, followed by the age group 46 to above 56 (20%). Approximately half of those surveyed have a BA or graduate degree, while a high school education or lower made up (45%) of respondents. Engineer was the most represented occupation among those surveyed, comprising (16.1%) of respondents. In addition, 62% of those surveyed work in the government, while only 16% work in the private sector. Respondents with a monthly household income below \$563 accounted for (53%) of the sample, followed by respondents with incomes between \$564 and \$845 (33%). Higher income earners greater than \$845 represented (13%) of the sample. 53.4% had family sizes between 3 and 6 persons.

Of the respondents, 45.5% are residents near the

Ailoun forest. The remaining 54.5% reside near the Dibeen forest. When asked about the area of the forest, respondents gave a wide range of answers between 100 and 60000 dunums. 50% of respondents believe the area of the forest to be 8400 dunums or less, while the remaining 50% believe that the forest is between 8500 and 60000 dunums. The disparities between the estimated areas reveal that respondents do not know the exact area of the forest. On the management side, most respondents believe that the forest is being managed by governmental bodies, with 39.3% of responses. In contrast, 29.5% of respondents believe that management of the forest rests with non-governmental supervisors. An additional 29.5% of respondents report that the local community supervises the forest. These results suggest a lack of consensus among local community members regarding who is responsible for management of the forests.

i ne Frome of the respondents					
Characteristics		Frequency	%		
	Below 25	6	0.05		
	26-35	41	0.37		
Age	36-45	42	0.38		
	46-55	16	0.14		
	56 and above	7	0.06		
	Below High School	17	0.15		
	High School	34	0.3		
Education	BA	54	0.48		
	Graduate	7	0.06		
	Below 200JD	6	0.05		
	201-400JD	54	0.48		
income	401-600JD	37	0.33		
	More than 600JD	15	0.13		
Cardan	F	19	0.17		
Gender	М	93	0.83		
	Government	69	0.62		
Ormentian	Private sector	18	0.16		
Occupation	Retired	16	0.14		
	Other	9	0.08		

Table 4



Figure (2) Local Community Participation Forests Management

The majority of respondents believe that there is no local community participation in the management of the forest, with 67.9% of responses. Among those who responded yes, the level of local community participation in managing the forest was believed to be weak.

Of those surveyed 70.0% report that the local community's doesn't has the ability to manage the forest in the meantime, while 20.5% of respondents believe the communities are capable to manage the forests. The majority of the local community feels that they are not equipped or qualified to effectively manage the forest.

These results are reflective of the reported lack of training in forest management among local community members. On the other hand, and despite the reported lack of training and low level of ability in managing the forest, 65.5% of respondents agree moderately or strongly that the local community should participate in forest management. This suggests that there is a willingness among the local community to play a role in managing the forests.

The respondents were asked to rate their opinion using a ten-point Likert scale, with "less than five" indicating "don't agree or weak" and "five to seven" indicating "moderate, and "eight to ten" indicating "strongly agree". Table 3 shows the ranking of the items for each question. The results revealed that respondents feels that local community are not capable to run the forests, but they need to be prepared for that and the results shows that local community agreed on the importance of the ecological role of the forest to the region and the weather, with mean around 8 and 9.

Ranking of respondents' opinions'						
Question	Ν	Mean	Rank	Importance		
Local community are capable to manage the forest	110	3.7	L			
Local community should participate in the management of the forest	110	6.6	М			
The forest generating income for local community	110	4.8	L			
There is an opportunity for better economic role for the forests than the current	109	7.4	Н			
The forest create job opportunity for local community			М			
The forest play an ecological role to the region	110	8.8	Н			
The forest attract tourists to the region			Н			
The forest need to be protected because it improves the climate			Н			
Forest must be maintained because it is home to wild birds and animals	109	9	Н			
High fuel prices contributed to the increase in attacks on the trees	109	9.4	Н			
The local community is aware of the importance of the forest	109	4.6	L			
It is necessary to involve the community in the management of the forest	109	7.5	Н			
Local community more careful than government agencies on the forest	110	4.1	L			

 Table (5)

 Ranking of respondents' opinion

¹ L=Low (0-4.99), M=Medium (5-6.99), H=High (7-10)

Need for Training

The majority of local community members report that they have not received training in forest management. Given that 78.6% of respondents are not trained to manage the forest, the local community will need sufficient training programs if a participatory management approach is to be undertaken.

Table 6
Have you received training in forest management?

	Frequency	Percent	Valid	Cumulative	
	Trequency	1 of cont	Percent	Percent	
No	88	78.6	80.7	80.7	
Yes	21	18.8	19.3	100	
Total	109	97.3	100		

This explains the urgent need for community training and capacity building on forest management. This step is very primarily on governance process because the local civil society and other stakeholder should be at least on the same level to participate and cooperate together to reach successful forest management. the most positive signs from the community side are they believe that on current situation are unable to make forest management, they are in need for training and capacity building on forest importance, management, conservation, ecotourism and also how to response to the threat facing the forest.

Several respondents reported a lack of staff or inexperienced staff as a major weakness of the current management of the forest, accounting for 27.9% of responses. Another 11.7% of responses cited weak cooperation with the local community as a problem with the current management

Respondents also cited weak protection of the forest and lack of awareness among the local community regarding the importance of the forest. Of the respondents, approximately 23.4% suggested increasing awareness in the local community regarding the importance of protecting the forest. This could be achieved through training, workshops, and education in the schools. Similarly, 15.3% of responses included some type of training program or workshop for the local community on forest management and preservation. An additional 20.7% suggested modes of engaging the local community in the management and protection of the forest, perhaps through a local committee or community project for the forest. About 9% of respondents cite tourism or the establishment of restaurants as possible ways to involve the local community in forest management.



Figure (3)

What are your suggestions to increase local community participation Economic and Ecological role of the forests?

Base on the current situation, 62.7% of local community members disagree with the statement that the forests generate income for the community. Similarly, 85.5% of respondents believe that they are not receiving a direct financial benefit from the forest. These answers are describing the current situation, where local communities have very low direct benefits out of the forests. However, 86% of respondents moderately or strongly agree that there is an opportunity to increase the economic role of the forests through eco-tourism activities, table. This suggests that the forests hold potential to bring economic benefits to the surrounding community that are not being taken advantage of under the current management.

When asked whether the forest creates job opportunities for the local community? Responses were

more dispersed. 33.6% of respondents strongly agree with this statement, while 50.0% disagree. These results suggest a lack of consensus regarding the current capacity of the forest to provide job opportunities for the local community. In addition, 86.0% of respondents cite tourism as the best utilization of the forest. However, it is important to note that 50.0% of respondents do not know what ecotourism is. Considering the fact that several respondents cited poorly managed tourism as a threat to the forest, staff and community members will need proper training if tourism is to be pursued in the forests.

When asked "*What do you think the best opportunities* of the forest for local community", 16.2% of respondents cited a development project in the forest. An additional 27% of responses cited tourism as the best utilization of the forest for the local community. Another common response was the creation of jobs in the forest for the local community, mentioned in 13.5% of responses. In addition, 8.1% of respondents believe that the best utilization of the forest is for the community to benefit from the dry wood for fire. This suggestion should be taken in light of the fact that 56.7% of respondents cited tree cutting as a major threat to the forest.

There is a clear consensus among the local community that the forest plays an ecological role in the region, with 94.5% of respondents moderately or strongly agreeing with this statement. Respondents also agree that the forest attracts tourists to the area, with 96.4% moderately or strongly agreeing. In addition, there is a strong consensus that the forest needs to be protected because it improves the climate and maintains biodiversity. These results suggest that the local community is aware of the ecological and economic benefits of maintaining the integrity of the forest.

In addition, 76.1% of respondents moderately or strongly agree that it is necessary to involve the community in the management of the forest, this result agreed with another result that shows 76.4% of respondents do not believe that the municipal government is capable of managing and supervising the forest.

Most respondents moderately or strongly agree that the private sector can contribute to the development of the forest, accounting for 79.1% of responses. When asked which areas the local community can contribute to, 30.6% of responses mentioned protection or management of the forest. An additional 18.9% of respondents cited tourism or a restaurant inside the forest as the primary mode of community involvement in the management of the forest. Of those who responded, 18% cite weaknesses in the law as an obstacle to community involvement in forest management. An additional 9.9% of responses blame weak awareness among the local community regarding the importance of the forests. Other respondents cite a lack of support, cooperation and communication between the government and the local community in the management of the forests. In order to overcome these obstacles, 23.4% of respondents suggest training and awareness programs for the local community. In addition, 17.1 % of responses suggest modifying legislation to facilitate more local community involvement in forest management. Other suggestions include investing in development projects and improving communication between the government and the community.

Threats facing Ajloun and Dibbin Forests:

Fires were cited in 53 times of responses as one of the major threats facing the forest, often coupled with insufficient cleaning of wood debris on the forest floor. Another common threat reported by community members was the cutting of trees in the forest, mentioned 52 times of responses. Respondents also cited overgrazing as a threat to the forests in 20 times of responses. Other repeated threats of visitation 18 times and hunting 4 times. in addition, poorly managed tourism and the overlap of public and private land ownership in the forest also mentioned as kinds of threats. These results suggest a consensus among the local community when identifying the major threats to the forest, notably forest fires and tree cutting as firewood.



Major Threats that Facing Ailoun and Dibbin Forest Discussion

The disparity of the answers indicated that people as partners in the study area need to be shared the essential information to know as a base to start from building the

whole plan and governance.

The most important findings of this study that there is a gap between the officials and local community in terms of exchanging information and cooperation for the best use of the forest. Locals are aware of the ecological and economic role of the forest and willing to invest in the forest to get benefit of eco-tourism. In this regard it is important for the government to cooperate with the local community in a way that not to misuse the resources of the forest. Also to focus on identifying, designing and providing the training for forest management and governance, starting a business, eco-tourism, customer services and the ecological role that trees provide for humans. For example, Just 100 trees can remove two tons of carbon dioxide from the air annually, and as a result of the urbanization, this service of air purification has become more necessary than ever.

The results indicated that respondents believe that local communities are not capable of managing the forests by themselves alone, but after the training and with the cooperation with the government and other stakeholders, they will be ready to participate. Therefore more awareness is needed for locals and especially for students in schools about the economic and ecological advantage of the forest.

Sustainability should be the main goal of the PFM model in the study area which also should include environmental, economic and socio-cultural aspects of implementing the eco-tourism as number one priority that local community voted for. The three diminutions of this approach (environment, economic and socio-cultural) guarantee its long-term sustainability if carefully built.

It is essential to inform locals know who is supervising the forests as of now and what will be the future's strategic plans. Sharing such information with locals is essential to know as a base to start from building the whole plan.

Regarding the legislations that may need to be changed, the majority of respondents pointed toward opening the forests for private sector and local communities for investment and using the dry wood. When asking about weaknesses in the current management of the forests, some of the respondents talked about how the government do not have effective monitoring and controlling systems over the forests, and they hire unskilled employees, and lack of coordination and cooperation with the locals. Therefore, more awareness is needed for locals and especially for students in schools about the economic and ecological advantage of trees. Based on the survey, the respondents identified sources of risk facing the forests such as: (fire, visitors, building, cutting trees, not managed tourism, climate change, snow, grazing, hunting, and fuel prices).it is important to listen to the locals to help us identify risks that forests are facing and listen to them when asking for the their suggestions as partners to avoid these risks.

The locals think they do not get direct financial benefit from the forests, they still believe that there is an opportunity to maximize the benefits especially by investing in ecotourism.

Conclusion

Based on the results of the study, there is no doubt that local community has no involvement of the management process; furthermore they don't see that the forests provide them with any economical benefit, but they think the forest has a potential to invest in, especially in tourism. The following table summarizes the three pillars of sustainability, goals, training topics and outcomes we are looking for out of this project.

PFM Model for Biodiversity and Economic Development in Dibbin and Ajloun				
Theme	Goal	Training topics	Outcomes	
		General introduction to the meaning of		
	Meet the goal of the project	environment and it's component	Reduce conflict of interest	
	Increase the awareness of the	The ecological importance of the forest to	and increase understanding	
	ecological and economic role of the	the environment and people in the targeted	and social acceptability	
Environment	forests in Dibbin and Ajloun	area and the environment	between stakeholders	
	Empowerment of rights and	The economic importance of the forest to	Understand the national and	
	responsibilities of all parties in the	the local and national economy	international regulations of	
	targeted area	The national and international rules and	Understanding the meaning	
	Participate in the decision making	regulations that organize this sector	of eco-tourism	
		Concept of eco-tourism		
		How to start a husiness		
	Promoto local husingsage	Cost honofit analyzes		
	Create new ichs	Identify market and paeds		
	Deduce recuertu rete	Legal igness in hydroge monocoment in	A shiawa a win win situation	
		Legal issues in business management in	Dialogue awaranges reising	
Economics	Utilize resources	forestry area	Dialogue, awareness raising,	
	Participate in the decision making	resource assessment, values assessment,	information sharing,	
	Institutional development and	policy and institutional analysis	feasibility assessment	
	capacity building	eco-tourism business management, ethics		
	Invest in eco-tourism business	and approaches		
		customer satisfaction		
	Enhance skills of participants			
	Promote mechanism to work			
	together	The concept of capacity building	lowers the cost of working	
	Increase community satisfaction	The community responsibility in forest	together and facilitates	
a	and reduce conflicts	protection	cooperation and trust	
Social	Enhance social equity	The role of education system in forest	enhance cohesion of	
	Participate in the decision making,	protection	community for mutual	
	and communication	Religion, culture and environment	benefit	
	Institutional development and			
	capacity building			

Table (7) Training needs

REFERENCES

- Al Ouran, N. (2010). Facilitating Financing for Sustainable Forest Management in Small Islands Developing States and Low Forest Cover Countries. indufor.
- Alcántara, (1998). 'Uses and Abuses of the Concept of Governance, International Social Science Journal 155,105–13.
- Belanger, K. (2006). Ecotourism and its Effects on Native Populations. Retrieved 10 19, 2009, from Department of Geography at Maryland: http://www.geog.umd.edu/
- FAO. (2010). Global forest resources assessment. Rome: Food and Agriculture Organization of the United Nation.
- Fodor, Á., and Sitanyi, L. (2006). The Relationship between Ecotourism Clusters and Innovation Milieu in the Region of South-Eastern Europe. Retrieved 10 17, 2009, from Universitatis Apulensis: http://www.oeconomica.uab.ro/upload/lucrari/1020082/1 4.pdf
- Geoghegan, T. (2002). Participatory Forest Management in the Insular Caribbean: Current Status and Progress to Date.
- Goussous and Hadad. (2014). Innovation of New Tourism Trails and its Effect on the Ajloun Touristic Process. Journal of American Science,10(4s).
- Hadadin, N. and Tarawneh, Z. (2007). Environmental Issues in Jordan, Solutions and Recommendations. American Journal of Environmental Sciences, 3, (1): 30-36.
- Isaacs, J. (2000). The Limited Potential of Ecotourism to Contribute to Wildlife Conservation. Wildlife Society Bulletin, 28, (1): 61-69.
- IUCN. (2004). International Union for Conservation of Nature. Retrieved 10 5, 2009, from http://www.iucn.org/.
- Khan, S. A. (2006). Environmantal Management of Tourism Development in Pakistan. Retrieved 2009 йил 13-10 from United Nation- ESCAP: www.unescap.org
- Michael, D. Liu W. and Liu, Z. (2013). Geography, trade and regional development: the role of wage costs, exchange rates and currency/capital movements. Journal of Economic Geography, 14, (6): 1175-1197.
- MoE. (2013). The National Climate Change Policy of the Hashemite Kingdom of Jordan 2013-2020. Retrieved 2

22, 2015, from United Nation Development Programme: http://www.jo.undp.org/

- MoE. (2014). Fifth National Report on Biodive. Amman: Ministry of Environment.
- MoI. (2013). In Ajloun's comprehensive operating strategy 2013-2015. Ajloun: Ministry of Interior, local Development Directorate.
- Namrouqa, H. (2008). Kingdom's nature reserves feature on world tourism map. Amman: Jordan Times.
- Oughton, E. and Al-Dajani, R. (1998). Survival and change in the northern Badia of Jordan: the role of women in the Bedouin household.
- Polyzos, S. and Arabatzis, G. (2006). A multicriteria approach for the evaluation of tourist resources of Greek prefectures. Tourism Today, (6).
- Price, D. and Isaac, K. (2012). Adapting Sustainable Forest Management to Climate Change:Scenarios for Vulnerability Assessment. Ottawa, Ontario: Canadian Council of Forest Ministers.
- RBG. (2011). Royal Botanical Garden. Retrieved February 2012, from http://royalbotanicgarden.org/page/overview
- Richins, H. (2009). Environmental, cultural, economic and socio-community sustainability: a framework for sustainable tourism in resort destinations. Environment, Development and Sustainability, 11, (4).
- RMW. (2013). http://rubinmallows.com/case-studies/rmwin-the-middle-east/jabal-ajloun.
- RSCN. (2014, 10 19). The Royal Society for the Conservation of Nature (RSCN). Retrieved 10 19, 2014, from The Royal Society for the Conservation of Nature (RSCN) : http://www.rscn.org.jo/
- Siyaha. (2013). http://www.siyaha.org/siyaha_news/228.
- Society, I. E. (2009). ecotourism.org. Retrieved 2009 йил 5-10 from www.ecotourism.org
- UNEP. (2013). Green Economy and Trade. New Yourk: United Nations Environment Programme.
- West, P. Igoe, J. and Brockington, D. (2006). Parks and Peoples: The Social Impact of Protected Areas. Annual Review of Anthropology, 35: 251-277.
- WTTO. (2006,2008,2014). Travel and Tourism Economic Impact 2014. London: World Travel and Tourism Organization.

دعم السياحة البيئية من خلال الإدارة المستدامة للغابات

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ملخص

تعتبر الحفاظ على الممتلكات والاستدامة والتخفيف من حدة الفقر هي التحديات الرئيسية التي تواجه البلدان النامية. ولتلبية هذه القضايا الثلاث، من الضروري إشراك المجتمعات المحلية في عملية صنع القرار عند إدارة الغابات أو أي موارد محلية. تهدف هذه الدراسة إلى التعرف على دور المجتمعات المحلية المجاورة لغابات دبين وعجلون في أنشطة الحفاظ على الغابات وإلى أي مدى يعتقدون أن السياحة البيئية وسيلة للإدارة والتتمية الاقتصادية لجعلها قاعدة لنهج الحوكمة في هذا المجال. ولا تظهر النتائج أي دور المجتمعات المحلية في عملية صنع الأوران عند إدارة الغابات أو أي المجتمع المحلي أو البلديات قادرة على إدارة الغابات. لكنهم يعتقدون أن المجتمعات المحلية في عملية الإدارة، ويعتقد المستجيبون أن المجتمع المحلي أو البلديات قادرة على إدارة الغابات. لكنهم يعتقدون أن المجتمعات المحلية على همية المحلية المحلية المحلية المتعربة المتحبيون أن المجتمع المحلي أو البلديات قادرة على إدارة الغابات. لكنهم يعتقدون أن المجتمعات المحلية على هذه المحلية يجب أن تكون مستعدة

الكلمات الدالة: السياحة البيئية، الحوكمة، عجلون، الأردن، تتمية المجتمع.

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