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# **Economic Evaluation of Delfard Region by Travel Cost Method**

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## **ABSTRACT**

To seem it is necessary to raise level information about valuation natural region with increase visitor of it area with purpose circulation and recreation. The region is one of area healthy climate with great ability for circulation that locate in south Kerman province and north Jiroft township. It searches to aim estimate recreation value Delfard region to method and the element particulars Socia \_ economic circulation and increase expense and resort to region. Experience show that are fifty three percent educated recreation and most member in age array twenty five – thirty four that to arise effect level high education and recreation young of Delfard area.

Also most self-visitor election summer season for survey that show nature important it area and to set forth original cause of nature enjoy. Regression lion Hand written show relation virtually between whole expense travel and number visitor. Finally draw demand curve with locate relation between travel cost method and number visitor each area of Delfard recreation and calculation level curve bottom estimate value Delfard region recreation about two hundred fourteen million dollars or seven \_ hundred twenty one billion Rials of Iran in years.

**KEY WORDS:** Economic Evaluation, Travel cost method, Delfard region

#### INTRODUCTION

Today use economic valuation recreation source on the ground of tool effective management for to determine about plan development design by environment direction .Accomplishment like valuation is not avoiding and to deny they existence is regret .Use the method is need know value price desirability source recreation and also know value damage expense and damage source recreate .

Value one of change is it arise change quantity and quality in goods explosion of particulars the good in people welfare. Finally thing is valuable that help to people welfare and valuable. (Kant 2007)

Valuable economic recreative use of different method .Some of method like travel cost method and contingent valuation method are torility demand curve and some of method like replacement cost method and opportnity cost method are independent demand curve.(Loomis and richardson 2000).

Of between mention method, method travel cost method is suitable tool for valuation recreation manner and the intrenchment. (Ward and Beal 200). Just as circulation travel to place with source and attractive particular nature and provide the travel manner aim information for analyse demand nature recreation.

Travel cost method could estimate value nature economic that to show measurment in direct benefit and consumer surplus (Shrestha 1991, Hellerstein 2007) about recreation value table complicated most search in world surface and Iran. Herath and kennedy estimate two meth travel cost meth one million hundred twenty eight thousand two hundred sixty two Australia dolor and condition value nineteen million eight hundred fifty three thousand eighty four Australia dollors Buffalo mountain national Park. Value general economic Apalachi cola river in American Folurida to travel cost method forty eight million four hundred fifty six dollors and value years promenade Choghakonor international wetland in Iran to way cost area travel five hundred thirty million Rials Ghaemi and Panahi in another search daily value economic to travel cost method source dime Charmanal and Bakhtiari province travel cost method seven \_hundred twenty million. The Delfard region recreation attractive every year most traveling and have more gravity like waterfall and river and jungle and have mediate weather to arrest.

A compliment directorship method for best use and avoid of demolition and know enough of directorship limit region. To aim valuation social-economic Delfard region in search.

# MATRIAL AND METHOD

## 1) Study area

The Delfard recreation area with have area hectare thirty nine thousand seven hundred twenty one is in north Jiroft Kerman province that have nearly distance twenty five kilometer of cent Jiroft city.

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Of dependencies Kerman province and part sardia and Delfard rural district and locate in bound geography length eastern 572916 till 572940 and 294519 till 284529 north western.

Summer quarter prosperous and Delfard beautiful with have waterfall die daughter and aim cent nurture bee and provide honey and jungle devil pomegranate and height mountain and source Shoar river attractive every years . Village Delfard choice of eleven village Kerman recreation province towards recreation organization attendance cultural Kerman .

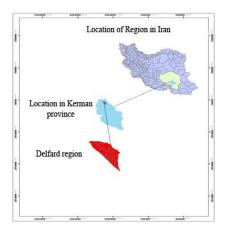


Fig 1. Geographic location of Delfard recreation region

#### Method of research

Way doing search give to base together information and quantity data and quality and locate geography limit and to survey of place and to compliment questionnaire by visitor and data analyses with use of Excel computer and Spss and finally to conclude result search.

Question hare distribution chance among relation of visitor time distance particular.

Prime together data to distribution number thirteen question among visitor Delfard region and in site.

Give number questionnaire with calculation variance it questionnaire and use of formula (Pak and Fenmi turker 2005)Question distribution efficient weather pleasant in summer every week and in hunter season every moon one time and spring every two week on time and finally compliance 170 questionnaire.

 $N=T^2S^2/D^2$ 

In it study use of travel cost method for estimate value Delfard region.

Because together of method questionnaire distribution existence it possible that have near relation with visiror .

And know with the idea and attention the idea in recreation plant that result together data with social value.

Also define sensitiveness and desire relative to price increase and in finally it method is only way that have completed attention to values social – economic . (Mayor 2007)

It method is stage like:

- 1. Locate collection region, define it area with draw center section in area
- 2. Together data about number visitor and to bearing mind number visitor in unit particular time
- 3. Calculate relation visitor in ever number ten thousand in every area
- 4. Calculate measure distance and travel time traffic in area
- 5. Locate relation between distance Demeter, travel coast method and number visitor to recreation with use of regression lion
- 6. Draw demand subject for visitor of method calculation consumer addition with level curve demand (Moons 2003)

To bearing mind one quarter wage number daily (Meconneland strand 1981).

Also to bearing mind supposed entrance 5000, 10000, 20000, 30000, 40000, 50000, 60000, 70000, Rial until visitor manner about increase price entrance.

For draw curve actually Delfard region to be inclined to paid thesis changeable independent and number visitor changeable dependent.

Efficient different entrance estimate in search and number visitor with each entrance.

Conformity three relation give value recreation Delfard region (willis, 1991)

 $VR = \sum N.AP$ 

N=number visitor VR=value recreation AP=price assumed entry

#### RESULTS

Valuation particulate visitor social economic with calculation variance estimate thirteen questionnaire between circulation and use of Cocarh formula .To prepare number questionnaire hundred seventeen that possible have not cooperation give questionnaire hundred fifty four .Result show that are sixty percent answer man and thirty three percent female and thirty five and eight percent single and sixty four and two percent married .

Most number questionnaire were forty eight and eight percent age span twenty five – thirty four and least visitor fifty eight percent in age span sixty five – seventy four . To observe that are most visitor of Jiroft and least of Yazd.

Most answer in search were literate . most percent studies licentiates degree with fifty three and fifty hundred percent and least percent illiterate with fifty eight percent .Ninety four percent were business and revenue and sixty percent were unemployment .Also have most questionnaire middle revenue in group four hundred till seven hundred Rials. Most questionnaire preference summer season for visitor of Delfard rural district .

The reason appearance cause in area recreation was interest to environment with twenty five and four percent and 18/8.

Most visitor reference more than three time . thirty five and nine percent of questionnaire to set forth that self expended in Delfard region about forty till eighteen hundred .Sum between eighteen till hundred fifty thousand with twenty three and fifty two percent to settle in three line .Thirty five percent about entrance paid suction were dissatisfied and remainder willing that choice expense least of 20000 Rials.

Compliment draw tool center circle to aim analyses information site distance residence questionnaire of area Delfard recreation .

Seven region are population twenty one million relation to city like Tehran and Mashhad and Ghoam and Arak and are six region such (Semnan , Kashan , Yasoj) .

Table 1:-give most changeable of questionnaire for each one visitor prince.

Midle number visitor (3=2/1)	Number visitor Retative to tenthousand	ecotourists No	Population (Ind)	Region (1)
0.018877	12100	121	641000	1
0.001737	4300	43	2475000	2
+	-	-	3000000	3
9.09 E-5	400	4	4400000	4
-	-	-	4200000	5
-	-	-	5000000	6
9.52 E-6	200	2	21000000	7

According two table give middle expend time chance number area Delfard seven

Table 2– mile expence time chance to area delfard recreation

Middle expence	number	precent	Precent collective
0	2	1.17	1.17
8333	8	4.7	5.87
25000	35	20.58	26.45
45833	75	44.1	70.56
70833	35	20.58	91.36
125000	9	5.34	96.7
166666	6	3.52	100
All	170	100	

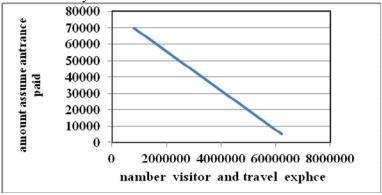
Experience show that is meaning relation data between all expended travel all and number visitor . (t>2 ,p<0 , 5) and regression lion between all expended travel all and number visitor . ( $r^2$  =0,090) To consider relation between education and number visitor and distance and expended and number visitor . Calculation value recreation pool area .

Estimate beside duty different ex trance in search number visitor with each ex trance duty in three table and bevel bottom curve region demand that is value recreation Delfard region to obtain daily 1975479452 and yearly 72105000000 according three relation.

Three list: calculation level botom curve demand Delfard region

Economic value thousandrial	Price assumed Entrance Rial	Number visitor
31130000	5000	6226000
58080000	10000	5808000
99440000	20000	4972000
124080000	30000	4136000
132000000	40000	3300000
123200000	50000	2464000
97680000	60000	1628000
55440000	70000	792000
721050000	Value all economic rial	

Graph one- five demand curve-actually



## **DISCUSSION**

Area Delfard recreation with have nature attractive is suitable site for ecotourism attract and to seem it is necessary that economic valuation it area to aim average much to ecotourism. Experience show that is effect age, education measure and measure visitor revenue in use of Delfard region .Most ecotourism have licensee degree education that are inclination for use of nature area (Shrestna2002).Most number visitor are in age line 25-34 that show young entrance for rest time and should elect necessary arrangement for service .Opportunity one percent of number questionnaire reference more than time three .Most reference time is high power recreation for ecotourism attract.

Most visitor entrance to nature region for travel that should be more attention to ecotourism improve and circulation.(Sirakaya 1999)Meaning relation region between all expended is independent chance and number all chance is depend chance that is relate reversed line that with expended increase to decrease of number visitor.

Year value Delfard are area recreation give about 24 million or 721 billion.

Compare with experience in other study show that value economic Delfard area is most of area like Buffalo mountain nation park in Australia and Choghakhor international wetland in Iran and least Apalachicola river region in America. Also give daily value recreation Delfard area that is more of daily value recreation source dime area in Bakhtiary and Charmanal.

It comprises importance recreation area Delfard fixed that should be most attention for director ship it area.

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