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Research Article

Effective indicators to measure economic and social - on the participation of rural people in watershed management activities Case study: Tar and Bar Catchment basins Damavand in Tehran province

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ABSTRACT:

Recognizing the problems and economic and social factors in partnership utilization due to its role inrural development in watersheds is obvious. the right people and the lack of detailed plan to achieve their goals, and by the enormous costs encountered in the protection and maintenance .But many watershed projects and activities are implemented without the participation and consultation of the people And in practice due to lack of proper cooperation of the people and the lack of detailed planning goals not achieved And the enormous costs encountered in the protection and maintenance .Examine barriers to participation is the most important indicator of the sustainability and success of watershed plansand the importance of watershed management practices will be successful.. To provide a clearer picture of the problem to study, research and studies on the topic of research was and with regard to the issue related to its research, the ideas of participatory development theorists discussed and economic and social indicators were considered for participation watershed .The factors influencing participation by field observation in the form of a questionnaire survey conducted this work .The sample consisted of 80 heads of households .Case study areais Tar and BarCatchment basins Damavand in Tehran province .In this study, the study area, the area of Damavand in Tehran province is TAR and BARWatersheds. With SPSS statistical analysis software was found that rural people have the incentives to participate as a result, it became clear fit between objectives and needs of beneficiaries with the participation of beneficiaries, there is no significant relationship. However, you can use advocacy programs , partnerships , raise awareness of rural residents increased their participation rates

Keyword: Water harvesting, socio-economic indicators, participation, Tar and BarCatchment basins. Tehran province.

INTRODUCTION:

Time warp and political watersheds within the city of Damavand, Tehran Province is located. In this area over the past five years, numerous activities have been carried Watershed. Now, after a couple of days and times appear watershed management activities in watersheds The socio-economic impact of these activities at the regional level, rural areas and local exploitation of economic and social improvements in the quality of life villages in this area are provided. Watershed management projects carried out in these areas with the aim of curbing and combating erosion, loss of soil, soil optimize the use of resources and increase production for crop production and livestock, watersheds increase the income of residents of watersheds and reduce the damages caused soil erosion, and flood waters and is fast. Comparing data before and after the program, including agricultural land level changes, increased production per unit area of agriculture and pasture, grazing capacity of discharge wells and aqueducts in the region And increasing the number of livestock, employment, migration,

population Reload will be evaluated and analyzed.

The analysis is based on data obtained changes in immigration , employment, income using frequency percentages carried out on them and For each watershed, socio-economic effects and comparing the results of a questionnaire survey of people in rural areas and operating under the basin and the percentage will be determined socio-economic changes.

MAIN GOALS:

-Understanding the socio-economic effects of watershed management activities conducted in the watersheds of TAR and BAR Damavand.

-Providing effective solutions in positive socio-economic impact of watershed management projects conducted in the watersheds of TAR and BAR Damavand.

BACKGROUND RESEARCH:

BAKHTIYAR-A.1998-Your plan entitled "Socio-economic Assessment flood spreading project Grbaygan" have provided. Calculations of the cost-benefit ratio B / C = 20 is shown. which indicate that water spreading, low-cost method of great efficiency . With increasing groundwater, the acreage of crops in the region increased from dry land to irrigated cropping pattern has changed. and rural life of one conventional dairy farms have changed the status of agriculture and employment has increased. Increased income level and its value have gained ground.

BANIASADI.M.1995- In his study entitled "Effects of small water aquifer management plan of Bam on socio-economic status of residents of small water" has. With the implementation of 500 hectares under cultivation has increased. Project in the region has caused many villages to work station area. also in the area of migration are quite tangible projects has decreased.

-KHOBFEKR.H.1999.In his study to evaluate the "economic, social and technological watershed management activities in Sistan and Baluchestan» Watershed's satisfaction with the activities carried out as one of the most important indicators is considered00% of people who give their consent to the general plan of activities (watershed) have announced. Of these, 9/68% satisfaction very high, 20% high satisfaction, 7% are moderately satisfied and only 1/1% have expressed satisfaction with their loss. 99% of people's participation in watershed management activities it deemed necessary because of the benefit of the people of these activities have enumerated

KOSAR.A.1986.In his plan as "desertification with flood control," stated concerted effort that this project will provide a better ground for the growth of native plants. In years 1982-19871 equal 38 million cubic meters during the flood plain Grbaygan network has been restored and transformed the lives of its inhabitants and Revenue rose plantations.Production capacity of fast growing tree species in these networks to 10 tons per hectare per year. Navigation provides irrigation facilities on the one hand, and a dramatic increase in the price of agricultural commodities on the other hand, a group of rural urbanization has to return to Grbaygan.

METHODS:

Given that in 1389 to 1390 master plan Damavand watershed by watershed management engineering services company jihad employers studies were prepared in Tehran. and then prioritized based on the master plan prepared detailed plans for implementation has been done. Damavand time warp and implementation of detailed studies watersheds between 1994 and 1995 in nine volumes by employers watershed management Watershed Consulting Engineers carried out in Tehran. Tar and bar watersheds are located in the central city of Damavand and covers about 15 villages. The catchment area of 14,000 hectares with a population of over 12,000 people include. That rural people (47%) are active in most agricultural activities, horticulture. Only during the 1984 flood in 8 deaths and damage to rural areas reached 60%

.Watershed major activities carried out in this area are: 419 flood, Section 309 stone, 29 Dam stone wall with gabionto over 1465 square meters and construction of water catchments across 28 hectares In the sixth part.

For the soil of vegetation the occurrence of flooding that regularly threaten Damavand has also prevents.So after more than 5 years from

the start date and time of watershed management practices in the basin is expected to That results at regional level and the exploitation of pastures is studied and analyzed. Accordingly, it is necessary to evaluate the activities carried out in watersheds time warp and creates the possibility Economic and social effects of watershed management practices and the impact of these activities on productive resources and employment, determine the ratio of benefits to costs is determinedAnd can be one of the important indicators of satisfaction and participation of the people in this areaAnd the effects of these operations on the situation of agriculture and rural areas downstream knew that the coefficient of variation can be shown.

CONCLUSION:

The watershed is the independent variableIs the dependent variable (the efficiency of agricultural production, employment rate, increasing per capita income, the rate of reduction of immigration) are included. n order to study the social status of the area before and after the program was as follows: Fill out a questionnaire (questionnaire socio-economic effects) was conducted.

A question of rural respondents Basin Tar and bar

Tables- Economic impact - social perspective load of tar watershed plan beneficiaries .

Question 1	Description	Percent
Actions and watershed management activities in the region, how do you evaluate?	Excellent	17
	Good	35
	Average	41
	No effect	4
	Bad	3
Total	-	%100

Question 2	Description	Percent
Which of actions and activities useful in solving socioeconomic problems in the area you evaluate?	Mechanical operation	34
	Biological operation	21
	both	30
	None	15
Total	-	%100

Question 3	Description	Percent
Do watershed management practices have been implemented to increase agricultural production?	YES	65
	NO	35
Total	-	%100
If the answer is affirmative, how is the project than before?	-	Percent
	Very high (more than 3 times)	10
	Relatively high (equivalent to 3 times)	56
	High (equivalent to 2 times)	34
	Average (equivalent to 1 times)	0
Total	--	%100

Question 4	Description	Percent
Does operations increased forage production on rangelands and watershed management has been implemented?	YES	77
	NO	23
Total	-	%100
If the answer is affirmative, how is the project than before?	-	Percent
	Very high (more than 3 times)	5
	Relatively high (equivalent to 3 times)	24
	High (equivalent to 2 times)	71
	Average (equivalent to 1 times)	0
Total	--	%100

Question 5	Description	Percent
Do watershed management practices implemented relieve water shortage issues in the region?	YES	88
	NO	12
Total	-	%100
If yes, in what has been a water shortage problems?	-	Percent
	Agriculture	42
	Drinking water for animals	21
	Human drinking water	28
	All of the above	10
Total	--	%100

Question 6	Description	Percent
Does the problem and the problem of flood and watershed management practices implemented damages that?	YES	86
	NO	14
Total	-	%100
If yes, in what has been the effect of the operation?	-	Percent
	Very much	4
	Relatively high	34
	very	48
	Medium	21
	little	6
Total	--	%100

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