

**RESEARCH ARTICLE :**

Constraints faced by participating farmers about sustainability of natural resource management under IWMP

■ ASHWIN RITHE AND NEERJA PATEL**ARTICLE CHRONICLE :****Received :**

07.06.2017;

Revised :

27.06.2017;

Accepted :

09.07.2017

SUMMARY : The sustainability of dry land area is widely endangered due to over exploitation of natural resources beyond their carrying capacity. Integrated management of natural resources namely land, water, vegetation, animal and environment on watershed basis has emerged as a logical and the most effective holistic approach for sustainable production and overall development of such areas. Watershed development provides an opportunity for optimum utilization of land and water resources and increasing the crop productivity. The present investigation was carried out in Rewa district of M.P. The Participating farmers of integrated watershed management programme running since the year 2009-10 were selected for the purpose of present research work through proportionate random sampling method to make a sample of 120 respondents. The major constraints experienced by the respondents on the basis of rank order as, difficult to mobilize people, uneven distribution of activities, demand for big bunds, lack of awareness about IWMP, low participation of people, low knowledge about natural resources and its management, people lack interest in committee, by laws and acts not acceptable to all, lack of flexibility, cast and political involvement and more lengthy procedure.

KEY WORDS :

Constraints,
Sustainability of
natural resource
management,
Participating farmers

How to cite this article : Rithe, Ashwin and Patel, Neerja (2017). Constraints faced by participating farmers about sustainability of natural resource management under IWMP. *Agric. Update*, 12(3): 425-427; DOI : 10.15740/HAS/AU/12.3/425-427.

BACKGROUND AND OBJECTIVES

The sustainability of dry land area is widely endangered due to over exploitation of natural resources beyond their carrying capacity. Integrated management of natural resources namely land, water, vegetation, animal and environment on watershed basis has emerged as a logical and the most effective holistic approach for sustainable production and overall development of such

areas. Watershed development provides an opportunity for optimum utilization of land and water resources and increasing the crop productivity. Watershed development is aimed at creating conditions conducive to higher agricultural productivity with conserving natural resources. Watershed development involves conservation, regeneration and judicious utilization of natural resources. It aims to bring about an optimum balance between the demand and use of natural

Author for correspondence :

ASHWIN RITHE
Zonal Agricultural
Research Station
(ZNKVV), CHHINDWARA
(M.P.) INDIA

See end of the article for
authors' affiliations

resources so that they remain sustainable over time.

Govt of India launched a modified programme of namely erstwhile Drought Prone Areas Programme (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Programme (IWDP) which named as Integrated Watershed Management programme during 2009-10. The programme has been implemented as per common guidelines for watershed development projects 2008. The main objectives of the IWMP are to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water. The outcome of this innovation project depend upon the extent of operationalization of the strategies and methods, competency and performance of the implementing agency, community response and involvement and also the processes followed in project management.

It is worth while to know the constraints faced by participating farmers about sustainability of natural resource management under IWMP. In order to ascertain the extent of sustainability of natural resource management and identify factors that contribute to sustainable development of natural resources and constraints faced by participating farmers about sustainability of natural resource management under IWMP, it has been felt essential to conduct a critical investigation about the Integrated Watershed Management Programme. Keeping this in view, the present study was carried out with the following objective:

- To identify the constraints regarding sustainability of natural resource management under IWMP.
- To know the suggestions for enhancement of

effectiveness of integrated watershed management programme

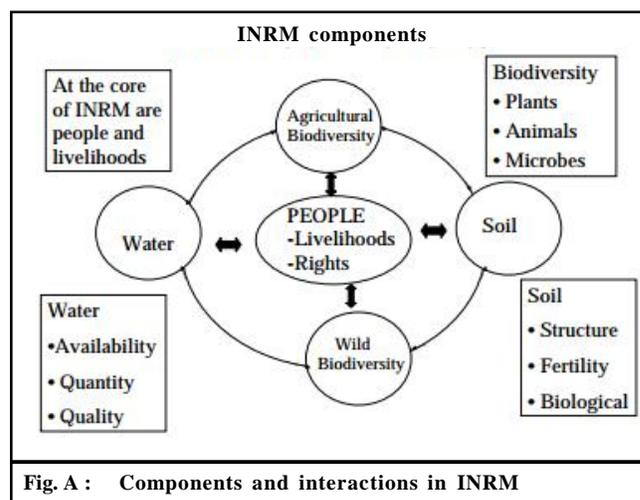


Fig. A : Components and interactions in INRM

RESOURCES AND METHODS

The present study was conducted in Rewa district having eight Integrated Watershed Management Programme. The programme has been running by the department of Panchayat and rural development in four blocks of the district. Out of these blocks each block has two watersheds. The maximum number of villages *i.e.* eight has been covered under IWMP-3 Simour. Hence, IWMP-3 of Simour block was considered for the study. From the total villages covered under this watershed 50 per cent villages in which the higher number of watershed management activities have been under taken during the last three years was selected. From these selected villages a list of the farmers who have participated in IWMP Sirmour was prepared. From this list the

Table 1 : Constraints regarding sustainability of natural resource management under IWMP

Sr. No.	Constraints	No. of respondents	Percentage	Rank
1.	Difficult to mobilize people	98	81.66	I
2.	Demand for big bunds	85	70.83	III
3.	Uneven distribution of activities	92	76.66	II
4.	People lack interest in committee	60	50.00	VII
5.	By laws and acts not acceptable to all	50	41.66	VIII
6.	More lengthy procedure	35	29.16	XI
7.	Lack of flexibility	42	35.00	IX
8.	Low participation of people	71	59.16	V
9.	Caste and political involvement	39	32.50	X
10.	Lack of awareness about IWMP	81	67.50	IV
11	Low knowledge about natural resources and its management	64	53.33	VI

Table 2 : Suggestions for enhancement of effectiveness of integrated watershed management programme

Sr. No.	Suggestions	No. of respondents	Percentage	Rank
1.	Involvement of the village leaders	73	60.83	V
2.	Training and visit by the specialists	85	70.83	III
3.	Involvement of only active members	78	65.00	IV
4.	Create awareness among the people towards IWMP	97	80.83	I
5.	Pre-treatment training	87	72.50	II
6.	Farmers to farmers education	65	54.16	VI
7.	Involvement of village representative	60	50.00	VII
8.	Use of local and familiar behaviour to the farmers	45	37.50	VIII
9.	Equal distribution of IWMP activities	35	29.16	IX
10.	Motivating the farmers for participation	28	23.33	X

participating farmers of IWMP were selected through proportionate random sampling method to make a sample of 120 respondents. Hence, finally the sample was consisted of 120 respondents.

OBSERVATIONS AND ANALYSIS

The participating farmers were asked to express the constraints experienced by them in relation to natural resource management under IWMP. The major constraints as perceived by them have been presented in Table 1. The results revealed that the respondents faced several constraints regarding sustainability of natural resource management under IWMP. The majority of respondents faced the difficult to mobilize people (81.66% of respondents), uneven distribution of activities (76.66%) and demand for big bunds (70.83%), Lack of awareness about IWMP (67.50%), low participation of people (59.16%), low knowledge about natural resources and its management (53.33%), people lack interest in committee (50.00%), by laws and acts not acceptable to all (41.66%), lack of flexibility (35.00%), caste and political involvement (32.50%) and more lengthy procedure (29.16%). The results reported by Chourasia *et. al* (2013) were similar to the present finding.

Suggestions for enhancement of effectiveness of integrated watershed management programme :

The respondents were asked to offer suggestions for enhancement of the effectiveness of integrated watershed management programme. Out of many suggestions offered by them the important suggestions appeared have been presented in the Table 2.

The results in Table 2 indicated that the majority of the respondents suggested as creating awareness among the people towards IWMP (80.83%), pre-treatment training (72.50%), training and visit by the specialists (70.83%), involvement of only active members (65.00%), involvement of the village leaders (60.83%), farmer to farmer education (54.16%), involvement of village representative (50.00%), use of local and familiar behavior to the farmers (37.50%), equal distribution of IWMP activities (29.16%), motivating the farmers for participation (23.33%). The results reported by Ram and Davari (2010) were similar to the present finding.

Authors' affiliations :

NEERJA PATEL, Krishi Vigyan Kendra (RVSKVV), DEWAS (M.P.) INDIA

REFERENCES

- Ban, S.H.**, Thorat, K.S. and Suryawanshi, D.B. (2012). Perception participation and constraints faced by rural women in Adarsh Gaon Yojana. *Mysore J. Agric. Sci.*, **46** (2): 370-374.
- Belay, D.**, Getachew, E., Azage, T. and Hegde, B.H. (2013). Farmers' perceived livestock production constraints in Ginchi watershed area: result of participatory rural appraisal. *Internat. J. Livestock Production*, **4**(8):128-134.
- Chourasia, P.P.**, Wani, A.K., Raghavendra and Sudi, S.P. (2013). Multiple impact of integrated watershed management in low rainfall semi-arid region: a case study from Eastern Rajasthan, India. *J. Water Res. & Protec.*, **5**(1): 27-36.
- Ram, M.** and Davari, M.R. (2010). Management of natural resources for sustainable dryland agriculture. *Internat. J. Agric. & Crop Sci.*, **2** (1): 9-25.