



Assessment of Television Ratings of Fisheries-based Programmes Telecast on *Krishidarshan* in West Bengal

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Abstract

Television Rating Point (TRP) is the criterion that indicates the popularity of a channel or programme and is used as a tool to measure the popularity of programmes that are viewed the most. Television Rating (TVR) provides information about viewers' television watching habits. While measuring the popularity of a programme or channel, TRP is computed in terms of TVR. This study was carried out with an objective to assess the popularity in terms of TVR of different fisheries-based programmes in comparison to agriculture and animal husbandry based programmes telecast under *Krishidarshan* in West Bengal. Details of programmes telecast by the national television channel (Doordarshan) through its Kolkata Kendra (DDK-Kolkata) during July to December, 2012 were collected along with corresponding TVR from the Audience Research Unit, DDK-Kolkata. It was found that 122 programmes were telecast during this period. The average TVR values for agriculture based programmes was 0.46, fisheries-based programmes was 0.41 followed by 0.31 for animal husbandry based programmes. Eventhough the number of fisheries-based programmes are relatively less compared to agriculture, statistically no significant difference was found as regards to TVR of the three. The state of West Bengal tops in fish production, so it is important that *Krishidarshan* increases its focus on fisheries-based programmes so that viewers can be aware of the recent advancements in fisheries and aquaculture.

Keywords: *Krishidarshan*, Doordarshan, television rating, fisheries, television rating point

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Introduction

In West Bengal, fisheries sector contributed 3.33% to the State Domestic Product at current price for the year 2009-10 and the state ranks top in fish production, comprising both inland and marine production of 15.38 lakh tonnes (Department of Fisheries, 2011). The Government has undertaken a number of fisheries development programmes besides a number of agriculture based audio-visual programmes telecast via different television channels. Television (TV) programmes are considered most effective in providing agricultural information and technological know-how to the farming community and help them to bridge the gap between scientists and the farmers. Shitak (2011) performed the appraisal of the TV and development communication in India.

While measuring the popularity of the programme or channel, Television Rating Point (TRP) is computed in terms of Television Rating (TVR) which provides an index of choice of the people. By means of TVR, different programmes are being ranked according to the viewers' responses and those programmes which are having higher TVR are considered as popular programmes assuming greater reach.

Farm programmes on Indian television started with the introduction of *Krishidarshan* programme on January 26, 1967. With the launching of Satellite Instructional Television Experiment (SITE) in 1975 and Indian Satellite (INSAT) in 1982, these programmes became accessible to vast majority of rural viewers. *Krishidarshan* was the first rural programme in the national television channel Doordarshan (DD). With time, DD started programmes in regional languages also. DD-Bangla (also known as DD-7) channel is a regional free-to-air channel of DD, supported by studios in Kolkata, Shantiniketan and Jalpaiguri. DD-Bangla is available to 97.1% of the population of West Bengal

(Prasar Bharti, 2013). A daily television programme (5 days in a week) in collaboration with the Ministry of Agriculture, Government of India, under the scheme Mass Media Support to Agriculture Extension telecast at 17.30 h on DD-Bangla (*Krishidarshan* in Bengali) was initiated in the year 2004. Two types of programmes *viz.*, recorded field based (Rec) and live-phone-in programmes (Live) cover various aspects of agriculture, horticulture, animal husbandry, fisheries, dairy and rural life of farmers (Ghosh, 2013). With this background, a study was carried out to assess the TVR of different fisheries-based programmes in comparison to agriculture and animal husbandry-based programmes of *Krishidarshan* among the cable TV and non-cable TV viewers of West Bengal.

Materials and Methods

Secondary data on details of programmes telecast by DD Bangla for the period July to December, 2012

were procured along with corresponding TVR from the Audience Research Unit, DDK-Kolkata. These were later segregated as sector specific programmes. It was found that 122 programmes were telecast during this period. Categorisation of the programmes was also done according to live-phone-in and recorded field based programmes. Based on information collected, ten programmes telecast on *Krishidarshan* in decreasing order of TVR were also listed. Descriptive statistics and parametric tests were used to analyse the data. To know whether there is any significant difference as regards to the TVR of all 122 programmes which were from agriculture, animal husbandry and fisheries, Analysis of Variance (ANOVA) was done.

Results and Discussion

Information on average TVR of the 122 programmes telecast during the period of study is given in Table 1.

Table 1. Average TVR of Agriculture, Animal Husbandry and Fisheries-based programmes of *Krishidarshan*

Programmes	Number of programmes	Average TVR of non-cable viewers	Average TVR of cable viewers	Overall TVR
Agriculture	100	0.90	0.02	0.46
Animal husbandry	12	0.61	0.01	0.31
Fisheries	10	0.80	0.02	0.41

Table 2. Programmes telecast at *Krishidarshan* in decreasing order of TVR

S. No.	Topic	Type*	Average TVR of non-cable viewers	Average TVR of cable viewers	Overall TVR
1.	Pest and disease control in guava cultivation	Rec	3.95	0.02	1.98
2.	Pest and disease control in rose cultivation	Rec	3.35	0.03	1.69
3.	A TV report on farmers' day	Rec	3.17	0.02	1.59
4.	Programme on nursery management of crops	Rec	2.85	0.01	1.43
5.	A TV report on international symposium on food security at BCKV (Bidhan Chandra Krishi Vishvavidyalaya)	Rec	2.75	0.08	1.41
6.	Cultivation of medicinal plants	Rec	2.38	0.00	1.19
7.	Pest & disease control in tuber crops (Stink lily)	Rec	2.36	0.00	1.18
8.	Programme on artificial fish breeding	Rec	2.31	0.02	1.16
9.	Rose cultivation	Rec	2.28	0.04	1.16
10.	Varieties of <i>boro</i> paddy & its cultivation	Live	2.26	0.03	1.15

* Rec: Recorded telecast; Live: Live telecast

It is observed that out of 122 programmes telecast during the period of study, 81.97% were agriculture based, 9.84% animal husbandry based and 8.20% fisheries-based programmes. Saleh (2010) has stressed that development of agriculture could be hastened with the effective use of mass media. Higher TVR means that the programme is popular and also effective. With reference to this, overall TVR was found to be the highest (0.46) for agriculture based programmes followed by fisheries-based programmes. To check whether significant differ-

ence existed between TVR values of cable *vis-a-vis* non-cable viewers of agriculture, animal husbandry and fisheries-based programmes, t test was performed. It was found that $t_{cal} = 9.58 > t_{crit} = 1.97$, so the H_0 was rejected leading to the conclusion that there is a significant difference in the TVR of cable viewers and non-cable viewers.

Based on the information collected, the ten programmes telecast at *Krishidarshan* in decreasing order of TVR are presented in Table 2.

Table 3. Fisheries-based programmes telecast at *Krishidarshan* in decreasing order of TVR

S. No.	Topic	Type*	Average TVR of non-cable viewers	Average TVR of cable viewers	Overall TVR
1.	Programme on artificial fish breeding	Rec	2.31	0.02	1.16
2.	Programme on hatchery management	Rec	2.13	0.00	1.06
3.	Hatchery management & seed production	Rec	1.06	0.04	0.55
4.	Brood fish & pond management	Rec	0.95	0.01	0.48
5.	Integrated fish farming	Live	0.73	0.00	0.37
6.	Fish health management & feed management	Live	0.57	0.00	0.28
7.	Fish rearing & planning for improved culture	Live	0.11	0.09	0.10
8.	Programme of fish rearing in school compound	Rec	0.11	0.00	0.06
9.	Programme on seed and artificial fish breeding	Rec	0.00	0.06	0.03
10.	Programme on artificial fish breeding	Rec	2.31	0.02	1.16

* Rec: Recorded telecast; Live: Live telecast

Table 4. ANOVA table of overall TVR of Agriculture, Animal Husbandry and Fisheries-based programmes

Source of Variation	Sum of Square (SS)	Mean Square (MS)	F _{cal}	P-value	F _{crit}
Between Groups	0.26	0.13	0.79	0.46	3.07
Within Groups	19.71	0.17	-	-	-
Total	19.97	-	-	-	-

Table 5. t test values between the cable vis-a-vis non-cable TVR of Agriculture, Animal Husbandry and Fisheries-based programmes

S. No.	Category	t-calculated	t-critical	Decision ($\alpha=0.05$)
1.	Cable and non-cable viewers of Agriculture based programmes	10.47	1.97	H_0 Rejected
2.	Cable and non-cable viewers of Animal Husbandry based programmes	-4.14	2.07	H_0 Rejected
3.	Cable and non-cable viewers of Fisheries-based programmes	-2.92	2.10	H_0 Rejected

Nine out of these ten programmes were recorded programmes and related to agriculture. Only one programme was fisheries-based and the rest were agriculture based. For all the programmes, the TVR of non-cable viewers was higher. Generally, programme on pest and disease management of crops had high TVR and the programme on pest and disease control in guava cultivation ranks first as regards to the overall TVR, which was 1.98. The reason of its high popularity can be justified as guava is the third most important fruit crop of West Bengal after mango and banana as reported by Mitra et al. (2008).

Based on the information collected, ten fisheries-based programmes telecast at *Krishidarshan* in decreasing order of TVR are presented in Table 3.

Programmes on artificial fish breeding or induced breeding and hatchery management were highly rated among the fisheries programmes (Table 3). The reason is the growing popularity of seed production through hatchery management among the fishers in West Bengal.

Only few studies on farm programmes like Lad & Wattamwar (2009), Badodiya et al. (2009) and Deshmukh & Wattamwar (2010) have reported to measure the effectiveness of agriculture based programmes. However, there are lack of studies on fisheries-based television programmes and more specifically on its TVR and effectiveness.

Results showed that at '5% level' $F_{cal} = 0.79 < F_{crit} = 3.07$, so the H_0 was accepted leading to the conclusion that there is no significant difference as regards to overall TVR among agriculture, animal husbandry and fisheries-based TV programmes (Table 4).

In all the cases, the value of t_{cal} (10.47, 4.14 and 2.92 respectively) was more than the t_{crit} value (1.97, 2.07 and 2.10 respectively). Thus the H_0 was rejected and it could be concluded that significant difference between cable and non-cable TVR values of agriculture, animal husbandry and fisheries-based programmes existed (Table 5).

Eventhough number of fisheries-based programmes telecast are lesser in comparison to agriculture and animal husbandry, the TVR of fisheries-based programmes is close to that of agriculture. Statistical tests revealed that no significant difference existed as regards to the TVR of agriculture, animal husbandry and fisheries-based programmes. With

no difference existing in the TVRs of the sector specific programmes and West Bengal being the highest contributor to inland fisheries, it can be concluded that *Krishidarshan* should increase its focus on fisheries-based programmes so that the viewers can be made aware of the recent advancements in fisheries and aquaculture. The DD may collaborate with the State Agriculture University and Fisheries Institutes of Indian Council of Agricultural Research. This can be instrumental in creating programmes on the recent advances leading to better dissemination.

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References

- Badodiya, S.K., Nagayach U.N., Shakya S.K., Garg S.K. and Daipuria, O.P. (2009) Effectiveness of farm broadcast in transfer of agricultural technology among the farmers. *J. Res., SKUAST-J.* 8 (2): 209-2015
- Department of Fisheries (2011) Annual Report (2010-11), pp 1-25, Directorate of Fisheries, Government of West Bengal, Kolkata
- Deshmukh, P.R. and Wattamwar, V.T. (2010) Effectiveness of farm programme *Amachi* Mati Amachi Mansa as perceived by televiewing farmers. *J. Agri. Ext. Management.* 11 (1): 107-114
- Ghosh, A. (2013) Effectiveness of fisheries-based television programmes in West Bengal. M.F.Sc. Dissertation (Unpublished), pp 3-5, Central Institute of Fisheries Education (Deemed University), Panch Marg, Off Yari Road, Mumbai
- Lad, A.S. and Wattamwar, V.T. (2009) Correlates of perceived effectiveness of televiewing farmers. *J. Dairying Foods and H. S.* 28 (3-4): 225-228
- Mitra, S.K., Gurung, M.R. and Pathak, P.K. (2008) Sustainable guava production in West Bengal, India. *Acta Hort. (ISHS).* 773: 179-182
- Prasar Bharti (2013) India's Public Service Broadcaster (<http://www.ddindia.gov.in>) (Accessed 11 March 2013)
- Saleh (2010) The role of television in the enhancement of farmers' agricultural knowledge. *African J. Agri. Res.* 6(4): 931-936
- Shitak, R.S. (2011) Television and development communication in India: a critical appraisal. *Global Media J. Indian Edition.* 2 (2): 1-26