



Access to and adoption of fisheries information by agricultural households

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Fisheries and aquaculture have gained incremental attention and policy focus in the recent years owing to the nutritional and economic significance. Recent years have witnessed stagnation in marine fish production, while inland fish production has shown an increasing trend (Sajesh et al, 2018). Inland fish production has increased from 28.45 Lakh tonnes in 2000-01 to 104.37 Lakh tonnes in 2019-20. Recent years have witnessed increase in freshwater farming by farmers either as a component of integrated farming system or as an independent enterprise.

Aqua potential of India and issues

Though there is impressive growth in inland fish production, it is not commensurate with the potential. The vast and underutilized resources comprising of 191,024 km of rivers and canals, 1.2 million ha of floodplain lakes, 2.36 million ha of ponds and tanks (DoF, 2020), 3.54 million ha of reservoirs and 1.24 million ha of brackish water resources offer great possibility for increasing fish production and thereby contributing to the livelihood security of millions who depends on the aqua value chain.

Jayasankar (2018) identified major constraints of fresh water aquaculture development in India as issues related to availability of quality seed, feed availability, appropriate technology at field level, land leasing tenure, social issues like poaching, water resource, climate change and credit facility. Many a time inadequate access to information related to the particular topics handicap them further in access to resources and adoption of appropriate practices. Also, there are reports that farmers depend mainly on traditional farming methods which need to be replaced by scientific farming methods for enhanced production as well as to ensure sustainability of the production.

Access to information has crucial role in enhancing the fish production, as quality information at right time facilitate access to other resources and adoption of appropriate technologies and practices. Information enable farmers to manage risks and uncertainties in farming and marketing and thereby ensuring the viability of their enterprise (Parmar et al, 2019). So, it is important to understand farmers' access to and adoption of fisheries related information in the context of demand for increased fish production and consequent requirement of related information.

Access to technical information by fish farmers

The NSS 77th survey report has revealed the agricultural households' access to and adoption of information related to agriculture and allied sectors. Unlike the earlier rounds, access to fisheries information was also included in the survey. The survey was conducted in two rounds. During, first visit (July to December, 2018), information was collected from 58035 households and in the second visit (January to June, 2019) 56,894 households were covered. Average of the number of households which reported access to information from different sources during both the visits was taken for further analysis and interpretation in this article

Table 1: Percentage of agricultural households accessed fisheries information from different sources

Source/ Info	Seed production	Harvesting	Managemen t & marketing	others	any
Progressive farmer	0.1	0.2	0.1	0.3	0.75
Input dealers	0.05	0	0.05	0.3	0.5
Government extension agent/ATMA	0.15	0.1	0.05	0.5	0.8
Krishi Vigyan kendra	1.3	0.2	0	1.95	3.5
Agricultural university/college	0.25	0.25	0	2.6	3.1
Private commercial Agents	0	0.5	0.75	0.6	1.9
Veterinary department	0.1	0	0	0.25	0.35
cooperatives/Dairy cooperatives	0.1	0.2	1.8	0.75	2.85
Farmer Producer Organization (FPOs)	0	0.6	1.4	1.15	3.2
Private processors	0.3	0.25	0.8	0.45	1.8
Agri-clinics & centres	0.3	0.5	0.3	1.3	2.45
NGO	0.15	0.55	1.8	3.6	6.15
Kisan Call centre	0.05	0.55	1.05	0.75	2.4
Print media	0.15	0.55	0.85	0.8	2.3
radio/TV/other electronic media	0.15	0.8	0.55	0.95	2.45
Smart phone information	0.5	0.8	1.3	1.8	4.35

(Source: NSO, 2021)

Very small proportion of farmers has accessed fisheries information from various sources. Most accessed sources of fisheries information by farmers include Non Governmental Organizations followed by information availed from smart phone, Krishi Vigyan Kendras, Farmer Producer Organizations, Agricultural universities & colleges Cooperatives, agriclincs and agri business centres, electronic media, print media, private commercial agents, private processors, Government extension agents, input dealers and progressive farmers

The findings point out to the importance of strengthening the pluralistic information system in fisheries sector especially in terms of quality of the content. This assumes importance in the context of the renewed policy attention to the sector aiming enhancing production and export of fish. Krishi Vigyan Kendras were the most sought after source of information with respect to seed production, which implies the importance of the expertise of the subject matter specialists in KVKs as seed production is highly skill intensive and requires expertise in the area. Cooperatives, FPOs and Medias were accessed by higher percentage of farmers related to marketing and management in fisheries. It shows that information sources in the vicinity of farmers and possessing relevant information are accessed more by the farmers. One exception is progressive farmers, who were contacted less by the farmers for fisheries related information. So, it is important to include progressive farmers in the aqua information dissemination network through awareness and training programmes for better spread of fisheries related information among farmers.

Adoption of technical advices by fish farmers

In case of adoption of technical advices, it was observed that full adoption of the information accessed in case of Krishi Vigyan Kendras with respect to seed production and harvesting. It points to the credibility of the organization and consequent authenticity of the information

Table 2: Percentage of agricultural households that adopted the advice among those who accessed technical advice

Source/Info	Seed production	Harvesting	Management and marketing	Others	Any
progressive farmer	96.15	93.1	78.35	62.2	77.45
input dealer	92.85	25	54.55	49.3	59.7
Government extension agents/ATMA	87.5	50	0	36.1	45
Krishi Vigyan Kendra	100	100	0	42.6	71.05
agricultural University/College	50	50	0	32.15	41.65
private commercial agents	0	75	20	41.65	44.05
Veterinary department	43.75	0	50	53.35	64.95
cooperatives/Dairy cooperatives	33.35	25	80.5	38.55	65.2
Farmer producer organizations (FPO)	0	50	87.5	0	43.2
private processors	50	83.35	57.5	40.5	55.95
agri-clinics & ABC	50	0	50	12.5	25
NGO	50	75	65	43.55	53.7
Kisan call centres	0	66.65	60	66.65	51.35
print media	80	54.9	60.6	34.3	49.95
radio/TV/other electronic media	60	45.35	53.5	48.2	46.8
smart phone based information	75	87.5	62.5	67.75	71.6

(Source: NSO,2021)

Higher rate of adoption of information accessed from progressive farmers again points to their credibility as opinion leaders in the information dissemination network. Borah et al(2019) have observed that the factors like information source exposure, credibility of information source, training exposure and information management behaviour were found to have positive and significant relationship with the adoption of scientific fish farming practices of the fish farmers. More than half of the farmers who accessed information from media were found to have adopted the technical advices related to seed production, harvesting, marketing and management. So it is important to ensure the quality of the content being disseminated through various media to ensure that reliable information is being disseminated to farmers.

Conclusion

Recent years have witnessed increased emphasis on fisheries and aquaculture development in the country. Centrally sponsored schemes like blue revolution and Pradhan Mantri Matsya Sampada Yojana are aiming to enhance the fish production in the country. In order achieve the objective of increased fish production, access to and adoption of technical information is mandatory. Concerted action is required to harness the synergy of various agencies involved in information provision to ensure that farmers' information need is timely and adequately addressed.

References

- Jayasankar, P. (2018). Present status of freshwater aquaculture in India-A review. *Indian Journal of Fisheries*, 65(4), 157-165.
- NSO,(2021). Situation Assessment of Agricultural Households and Land and Livestock Holdings of Households in Rural India, 2019, NSS 77th Round Report No. 587(77/33.1/1), National Statistics Office, Ministry of Statistics and Programme Implementation, Government of India
- Parmar, I. S., Soni, P., Kuwornu, J. K., & Salin, K. R. (2019). Evaluating farmers' access to agricultural information: Evidence from Semi-arid region of Rajasthan State, India. *Agriculture*, 9(3), 60.
- Sajesh, V. K., Suresh, A., Mohanty, A. K., Sajeev, M. V., Ashaletha, S., Rejula, K., & Ravishankar, C. N. (2018). Trend and Pattern of Expenditure on Fisheries Extension in India: Implications for Policy. *Indian Journal of Extension Education*, 54(2), 32-40.