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Profile and sources of job-related information among migrant workers in the shrimp farming sector, Maharashtra, India

¹PP Yadav, ¹SV Patil, ²KJ Chaudhari, ¹SM Wasave, ³BM Yadav, ¹VH Nirmale, ¹BT Sawant, ¹BV Naik, ⁴VG Yewale, ²SC Kamble, ¹DI Pathan, ⁵RH Rathod and ⁵PA Telvekar

¹College of Fisheries (Dr. B. S. Konkan Krishi Vidyapeeth), Ratnagiri, Maharashtra, India

²Fisheries Engineering Polytechnic, Ratnagiri, Maharashtra, India

³Taraporewala Marine Biological Research Station, Bandra, Mumbai, Maharashtra, India

⁴Krishi Vigyan Kendra, Lanja, Ratnagiri, Maharashtra, India

⁵College of Fishery Sciences (MAFSU), Nagpur, Maharashtra, India

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Corresponding Author: SV Patil

Abstract

Aquaculture is an important source of food, income and employment opportunities in rural areas, while brackishwater shrimp farming contributes significantly to the coastal economy of a country. The shrimp farming sector depends considerably on migrant workers, who may face various many challenges during migration. Access to timely and reliable information on employment opportunities is therefore important for making informed migration and employment decisions. The present study examined the profile and sources of job-related information among migrant workers in the shrimp farming sector of Maharashtra. Information related to socio-economic profile and sources of job-related information were collected from migrant shrimp farm workers through structured interviews and analysed using descriptive statistics. The findings revealed that the majority of the workers were young (74.94%), unmarried (53.63%), and educated up to the primary level (92.73%). Most workers had 1–5 years of experience in shrimp farming (64.41%) and belonged to nuclear families (90.98%). More than half of the workers (53.63%) had an annual income ranging from ₹100,001 to ₹200,000. Friends were the major source of job-related information (39.35%), followed by previously migrated villagers (32.83%) and relatives (20.80%). Middlemen (4.51%) and recruiting agents (2.51%) were comparatively less important sources of information. The findings indicated that migrant shrimp farm workers largely depend on informal social networks, particularly friends, previously migrated villagers and relatives to obtain information about job opportunities. The study highlights the importance of providing reliable employment information and appropriate support services to migrant workers and may help in developing suitable welfare measures and safe migration policies for workers engaged in the shrimp farming sector.

Keywords: Source of job information, migrant workers, shrimp farming, Maharashtra, India

Introduction

Aquaculture has been one of the world's fastest-growing food production systems, providing a vital share of fish for human consumption and driving poverty alleviation through employment (SeaBOS, 2016; Hishamunda and Ridler, 2006; Asian Development Bank, 2004; Edwards, 2000; Heck *et al.*, 2007) ^[1, 2, 3, 4, 5]. Within this sector, brackishwater aquaculture, particularly shrimp farming, has emerged as a major economic activity driven by global demand, technological advancements and declining marine catches (Biao and Kaijin, 2007; Paul and Vogl, 2011; Kumar and Shivani, 2014) ^[6, 7, 8]. In India, aquaculture is predominantly concentrated in coastal regions (CIBA, 2020) ^[9], with national shrimp production reaching 12.53 lakh tonnes and exports generating US\$ 5,177.01 million in foreign exchange earnings (MPEDA, 2025) ^[10]. The sector employs more than 300,000 people nationwide (DAHDF, 2017) ^[11].

In Maharashtra, Shrimp farming is mainly concentrated in the coastal districts of Palghar, Thane, Raigad, Ratnagiri and

Sindhudurg. The expansion of shrimp farming in these districts has created demand for farm workers particularly for labour-intensive activities such as pond preparation, stocking, feeding, water-quality management, harvesting and post-harvest operations.

The availability of an adequate and reliable workforce is essential for the efficient operation of shrimp farms. However, shrimp farming operations is characterized by seasonal and fluctuating labour requirements resulting in considerable dependence on migrant workers. Workers often migrate from their native villages in search of employment opportunities and better income. Migration therefore forms an important livelihood strategy for many workers engaged in shrimp farming.

Access to reliable sources of information on job opportunities is an important factor influencing workers' migration and employment decisions. Information regarding the availability of job/employment is often obtained through social networks, friends, relatives, previously migrated villagers, middlemen

which can play an important role in connecting workers with prospective employers. Understanding the major sources and channels through which migrant workers obtain job / employment is therefore important for improving access to reliable information and promoting safer and more transparent employment opportunities.

Therefore, the study was undertaken to assess the profile of migrant workers and identify their major sources of job-related information in the shrimp farming sector of Maharashtra.

Materials and Methods

Maharashtra has a potential brackish water area of 52,001 ha, of which 10,400 ha has been identified as highly suitable for aquaculture. However, only 878 ha is currently utilized for shrimp farming (MPEDA, 2025) ^[10]. Shrimp farming is mainly concentrated in the coastal districts of Palghar, Raigad, Ratnagiri and Sindhudurg, which were selected as the study areas.

Based on the estimate of two workers per hectare of shrimp farm area (Sharma *et al.*, 2023) ^[12], the total shrimp farm workforce in the utilized area of 878 ha was estimated at approximately 1,756 workers. From this population, a total of 399 migrant shrimp farm workers were selected for the present study, comprising 144 from Palghar, 129 from

Raigad, 51 from Ratnagiri and 75 from Sindhudurg district. The study was conducted to assess the socio-economic profile and source of information used by migrant shrimp farm workers. Workers actively engaged in shrimp aquaculture farms were selected using a random sampling method. Primary data were collected through structured interviews using a pre-tested interview schedule. The schedule was pre-tested with 10 workers before the final data collection.

To achieve the objectives of the study, information on the profile of shrimp farm workers, including age, marital status, educational status, years of experience in shrimp farming, family size, family type and annual income, was collected. Information on the various sources of job-related information accessed by shrimp farm workers was also collected.

The collected data were tabulated, and analysed using descriptive statistics, including frequency and percentage, to describe the socio-economic characteristics and source of information of the migrant shrimp farm workers.

Results and Discussion

Profile of migrant shrimp farm workers

Information related to profile of migrant shrimp farm workers in Maharashtra were collected and same is presented in Table 1.

Table 1: Personal information of the migrant shrimp farm workers (N = 399)

Sr. No.	Characters	Categories	Frequency	Percentage (%)
1	Age	Young age (Up to 35)	299	74.94
		Middle age (36-50)	86	21.55
		Old age (Above 51)	14	3.51
2	Marital status	Married	185	46.37
		Unmarried	214	53.63
3	Educational status	Illiterate	19	4.76
		Primary	370	92.73
		Secondary	8	2.01
		Higher secondary	2	0.50
4	Farming experience (years)	< 1	30	7.52
		1-5	257	64.41
		6-10	94	23.56
		11-5	9	2.26
		>15	9	2.26
5	Family size	1-5	286	9.02
		6-10	77	19.30
		11-15	36	71.68
6	Family type	Joint family	36	9.02
		Nuclear family	363	90.98
7	Annual income	<100000	166	41.60
		100001- 200000	214	53.63
		200001- 300000	17	4.26
		300001- 400000	2	0.50

The results showed that the majority of the workers (74.94%) belonged to the young age group (up to 35 years), followed by 21.55% in the middle-aged group (36–50 years). Only 3.51% of the workers were above 51 years of age. Similar results were reported by Mohite (2007) ^[13] in Raigad district, Maharashtra and Rawool (2005) ^[14] in Thane district, Maharashtra.

More than half of the shrimp farm workers (53.63%) were unmarried, whereas 46.37% were married. In contrast, Sidam (2024) ^[15] reported that 80% of migrant labourers in the trawl fishing sector of Ratnagiri district, Maharashtra, were

married, while 20% were unmarried. The higher proportion of unmarried workers in the present study may be attributed to their younger age profile, whereas Sidam (2024) ^[15] reported that most workers belonged to the middle-age group (31–50 years).

In terms of educational status, the majority of the workers (92.73%) had primary-level education, followed by 4.76% who were illiterate, 2.01% with secondary education, and 0.50% with higher secondary education. The present findings are consistent with the observations of Chittem and Kunda (2017) ^[16], reporting that the majority of shrimp farmers

(27.70%) in Andhra Pradesh had primary-level education. Similarly, Tandel *et al.* (2016) ^[17] found that 46.59% of shrimp farmers in Valsad district of Gujarat had primary-level education.

In the farming experience, most of the workers (64.41%) had 1-5 years of experience, followed by 23.56% with 6–10 years of experience. About 7.52% had less than one year of experience, while 2.26% each had 11-15 years and more than 15 years of experience. Similar findings were reported by Yadav *et al.* (2024) ^[18] in the North Konkan region and Naik (2020) ^[19] in the South Konkan region of Maharashtra.

In terms of family size, the majority of the workers (71.68%) belonged to families with 1–5 members, followed by 19.30% with 6–10 members and 9.02% with 11–15 members. A higher proportion of the workers (90.98%) belonged to nuclear families, while 9.02% belonged to joint families. A similar finding was reported by Sidam (2024) ^[15] among labour migrants in the trawl fishing sector, Ratnagiri district, Maharashtra.

The results revealed that 53.63% workers had an annual income between ₹100,001 and ₹200,000, followed by 41.60% earning less than ₹100,000, 4.26% earning between ₹200,001 and ₹300,000, and 0.50% earning between ₹300,001 and ₹400,000. Similarly, Sidam (2024) ^[15] and Sharma *et al.* (2023) ^[12] reported that the majority of shrimp farm workers in India had a monthly income of less than ₹10,000.

Sources of job-related information of migrant workers

The migrant workers working in shrimp farming sector, Maharashtra were divided into five groups based on their major sources of job-related information such as friends, villagers who migrated earlier, relatives, middlemen and recruiting agents and as shown in Fig 1.

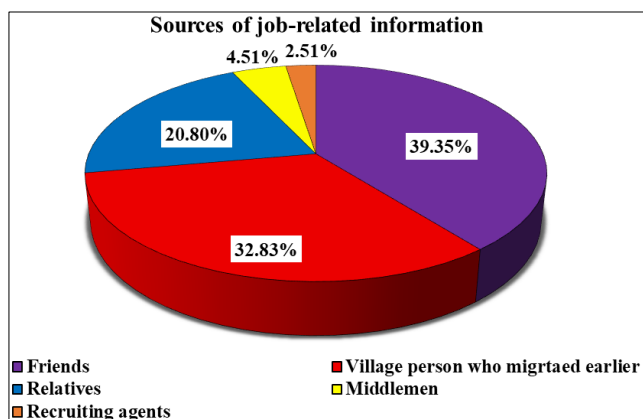


Fig 1: Sources of job-related information of migrant shrimp farm workers

It was observed that friends were the major source of job-related information among migrant shrimp farm workers (39.35%). Similarly, Sidam (2024) ^[15], in his study conducted in Ratnagiri district, reported that migrant labourers (35.83%) obtained job-related information from their friends. Sujatha *et al.* (2014) ^[20] also reported that friends were the major source of job information among migrants in Chennai (84.16%). Friends serve as an important source of information because they share firsthand experiences regarding job availability, wages, working conditions and the

location of shrimp farms, thereby helping prospective migrants make informed decisions about employment opportunities.

The second major source of job-related information is villagers who had migrated earlier (32.83%). This finding is consistent with Sidam (2024) ^[15], who reported that, previously migrated villagers were the second major source of job-related information (24.17%) for migrant labours. As previously migrated villagers shared information about employment opportunities, wages and working conditions, thereby helping prospective workers make migration decisions. This may be the reason that this is one of the sources of job-related information.

The third major source of job-related information is relatives (20.80%). Similarly, Saikia (2016) ^[21] reported that relatives were an important source of job-related information among migrant workers in Kerala (58.40%). Sidam (2024) ^[15] also reported that relatives were the third major source of job-related information for migrant workers in Ratnagiri district (18.33%). Relatives support in identifying employment opportunities and making migration decisions

The other sources of job-related information for migrant workers are middlemen (4.51%) and recruiting agents (2.51%). Similarly, Sidam (2024) ^[15] reported middlemen and recruiting agents as relatively less-used sources of information.

Overall, informal social networks were the major sources of job-related information among migrant shrimp farm workers, particularly friends, previously migrated villagers and relatives. These sources helped workers to access job / employment information and make informed migration decisions, while middlemen and recruiting agents played a comparatively minor role.

Conclusion

The findings revealed that migrant workers in shrimp farming sector, Maharashtra were predominantly young with nearly three-fourths belonging to the young age group. More than half of the workers were unmarried and the majority had primary-level education. Most workers had 1–5 years of farming experience, while majority belonged to small-sized families with 1–5 members and with nuclear families. Regarding annual income, more than half of the workers earned between ₹100,001 and ₹200,000.

The study further revealed that informal social networks played a dominant role in providing job-related information to migrant shrimp farm workers. Friends were the most important source, followed by villagers who had migrated earlier and relatives. In comparison, middlemen and recruiting agents contributed relatively little to the dissemination of job-related information. Thus, the findings indicated that migrant workers largely depend on personal contacts and previous migrants for information regarding job / employment opportunities, wages, working conditions and migration destinations. Thus, providing reliable job/employment information and proper support services can help the migrant workers to get timely and accurate information and make better decisions about jobs and migration.

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