

## **Whether the disparity of decent work exists among the marine fishers in Kerala?**

Shalini Mathews<sup>1</sup> Anitha V<sup>2</sup>

<sup>1</sup> Dr. Shalini Mathews, Assistant Professor, Department of Economics, Fatima Mata National College (Autonomous), Affiliated to the University of Kerala, Kollam.

<sup>2</sup> Prof. (Dr) Anitha V, Department of Economics, University of Kerala, Kariavattom Campus, Thiruvananthapuram.

### **Background**

Fishers, across the wide range of commercial marine fishing operations, commonly face prolonged working hours with the working rhythm determined by various factors like the sea and the catch, remote work, exposure to dangerous weather conditions, exposure to dangerous sea creatures, and no legal cover (Wagner, 2011). When evaluating the working conditions of commercial fishers globally using the four pillars of the decent work, namely employment, social protection, basic rights, and social dialogue, it is found that in the realm of employment, in small-scale fishing operations, interactions between employers and employees (typically fishing vessel owners) are flexible and is based primarily on oral agreements (FAO, 2016). Fisher's pay is based on a percentage of their catch and is prone to significant swings. It provides a compelling incentive to put in extra hours and carry on fishing in hazardous weather. In this method, the net revenues are split between the owner of the fishing vessel and the fishers according to a predetermined, frequently hierarchical formula and that too after deducting the vessel operating costs. Because of this structure, fishers are considered "self-employed" (FAO, 2016; Howard, 2012).

In the area of social protection, many developing nations are not guaranteed universal non-contributory social protection, despite the fact that fisheries and aquaculture are two major

industries. Since there is a large amount of informality even in those nations that guarantee it, the majority of fishers cannot make use of it (Conway et al., 1999; FAO, 2016; Pollnac et al., 1998).

Despite the fact that there are labour regulations in place, fishers frequently find it difficult to exercise their rights and make use of them and this can be attributed to the nature of their work (FAO, 2016). Due to gaps in the rules, regulations, and policies that different countries have created to protect the interests of employees, fishers are frequently at a disadvantage. Because the boats are frequently at sea for extended periods of time, monitoring the conditions in which fishers operate and ensuring that laws are followed can be very challenging (ILO, 2016; ILO, 2017).

In informal small-scale fisheries, there are even fewer members of fish workers' groups. This makes it difficult for workers to influence governance and policymaking processes and increases their reliance on middlemen and the unregulated loan market (FAO, 2016). Due to all of the aforementioned issues, there is a dearth of decent labour, and the fishermen are particularly affected (ILO, 2017).

When examining the aforementioned worldwide reflections, based on the decent work<sup>1</sup> frame, among Kerala's marine fishers, it becomes apparent that the information included under the employment domain clearly encompasses the marine fishing situation in the state (GoI, 1997; Parappurthu & Ramachandran, 2017). In terms of social protection, the Department of Fisheries in Kerala, led by the Ministry of Fisheries and its affiliated institutions, offers both promotional and protective measures to fishers (Kurien & Paul, 2001). Due to the extremely dangerous nature of fishing, there have been numerous fatalities in Kerala's marine fishing industry. The most frequent causes of accidents for fishers working in the mechanised sector<sup>2</sup> include falling overboard, capsizing of boats, and health problems (SIFSS, 2017). While the most frequent mishaps experienced by fishers in the motorised sector<sup>3</sup> are surf crossing, running over the net, and boat capsizing (SIFSS, 2017). The aforementioned facts highlight the threats faced by Kerala's marine fishers at their workplace.

There isn't a single, comprehensive law that covers all aspects of fishing labour for fishers throughout India. They are thinly dispersed throughout numerous pieces of legislation,

---

<sup>1</sup> The International Labour Organization (ILO) has besought a methodical explanation of the quality of work by means of its concept of decent work, which was officially floated in 1999 (Burchell et al., 2013).

<sup>2</sup> Mechanized sector embraces trawlers that rely on powerful engines for propulsion and fishing.

<sup>3</sup> Motorized sector incorporates crafts that makes use of out-board motors for propulsion of the fishing craft.

including the State Marine Fishing Regulation Acts, the Minimum Wages Act of 1948, the Unorganized Workers Social Security Act of 2008, the Child Labor Act of 1986, the Juvenile Justice Act of 2015, etc. (Roshan, 2016). Actually, unlike other unorganised sector workers, fishers in Kerala and the rest of India are not eligible for benefits like employee state insurance, provident fund, gratuity, bonus, etc. (NCEUS, 2009).

The fishermen's collective action, which transcended caste, creed, and political allegiances, became a reality in 1980 with the founding of the Kerala Swathanthra Matsyathozhilali Federation. These groups persistently fought for the adoption of various social security policies that were meant for the fishers.

Consequently from the viewpoint of these classifications, it is perceived that, the employment and rights at work in Kerala are on par with the global tendencies and hence, marine fishers in Kerala benefit from social protection and social dialogue. Thus it is implied that the decent work deficit<sup>4</sup> prevails among the commercial marine fishers and the extent to which it has impacted the lives of fishermen is vague. Thus, the article intends to examine the extent of decent work enjoyed by the fishers of motorised and mechanised sectors.

### **Data collection and methods used for analysis**

Among the three southern coastal districts, Thiruvananthapuram had a proliferation of motorised vessels but a dearth of mechanised fleet operations (Marine Fisheries Census, 2010). Due to the operation of numerous motorised fleets and less mechanised fleets, Alappuzha also demonstrated this significant difference. However, a proliferation of fleets from both the sectors could be found only in Kollam (Marine Fisheries Census, 2010). Therefore, Kollam was considered as the focus of this study.

The Kerala Marine Fisheries Census 2010 (Part II) was the only source of information on the overall number of full-time fishers in the Kollam district, and it estimated the total as 13,558. The craft-wise distribution of full-time fishers in the Kollam district who were actively engaged in fishing was needed for the study, but it was not available for reference. The following method was used to calculate the requisite but unavailable population size. It was provided that, 13,558 full-time fishers were the correct number of the population of fishers who were actively engaged in the two sectors. As portrayed in Table 1, an attempt was made

---

<sup>4</sup> It specifies shortage of commensurable employment opportunities, denial of rights at work, scarce social protection and shortcomings in social dialogues (ILO, 2001).

to figure out the sector-wise distribution of full-time fishers in each sector. The average crew size of each sector was assimilated from various authentic studies gathered from CMFRI, and it was multiplied by the number of crafts.

Table 1 highlights that there was a disparity between the full-time fishers (12,851) and the stipulated total population size of full-time fishers (13,558). This discrepancy may be explained by the fact that shore seine fishing was practised by both the motorised and non-motorized sectors, resulting in average crew sizes of 44 and 40, respectively. Due to this mismatch, the craft proportion was taken into consideration rather than the population in order to evaluate the decent work dimensions of the fishers and to estimate the sample size of fishers. Only trawlers from the mechanised sector were observed to be in action at the time of the pilot research in the Kollam district. According to the Kerala Marine Fisheries Census 2010 (Part II), of the crafts operating in the Kollam district, trawlers of mechanised crafts (950) and motorised crafts (546) were taken into consideration for the study. The sample size was computed using the craft Percentage at a 5 per cent level of significance, i.e., 306 crafts (112 motorised crafts and 194 mechanised crafts). The following steps were followed in order to compile the final craft-wise sample size of fishers from the mechanised and motorised sectors.

Initially, in order to identify fishers from the motorised and mechanised sectors, information on the number of fish landing centres based on the operation of the fishing vessel was first obtained from Kerala Marine Fisheries Statistics (2015) and Marine Fisheries Census (2010), as shown in Table 2. Secondly, information on craft owners based on landing centres was acquired from the Matysa Bhavan and various fisheries stations in Kollam. The craft size was calculated from all the landing centres based on the type of craft, displayed in Table 3.

Thirdly, senior crew members were selected as respondents for the survey using simple random sampling by the lottery method, with the assistance of craft owners (one crew member from each vessel (112 from the motorised sector and 194 from the mechanised sector). The interview schedule was designed to assimilate information from the fishers at the fish landing centres, including Thankassery, Wadi, Moothakara, Jonapuram, Quilon port, Pallihottam, Sakthikulangara, and Neendakara. The primary sector full-fishers<sup>5</sup> (fishery labour) employed in commercial marine fishing operations in the motorised and mechanised segments in the Kollam district of Kerala served as the study's analytical unit

---

<sup>5</sup> Fisher denotes the crew member on-board the craft at sea, apart from Srang, driver and owner-worker.

The decent work index construction was based on its theoretical literature, assigning equal weight to all its dimensions (Bonnet et al., 2003). A set of statements was formulated for each dimension on a 5-point Likert scale, and it was amalgamated into indices using the common formula  $(\text{Actual value} - \text{Minimum value}) / (\text{Maximum value} - \text{Minimum value})$  put forth by UNDP. The value of each index ranged between "0" and "1," with "0" denoting the lowest value and "1" denoting the highest value. The decent work index was created by calculating and combining the average values of all six indices. The decent work dimension indices as well as decent work index were segregated into three categories i.e., Low (below Mean – SD), Medium (Mean – SD to Mean + SD) and High (above Mean + SD).

### **Analysis and findings**

The notion of decent work was examined at the micro level in terms of security (Anker, 2002; Standing, 2002). At the micro level, decent work includes dimensions like labour market security, employment security, income security, work security, skill reproduction security and representation security.

The Kerala Marine Fisheries Census 2010 (Part II) was the only source of information on the overall number of full-time fishers in the Kollam district, and it estimated the total as 13,558. The craft-wise distribution of full-time fishers in the Kollam district who were actively engaged in fishing was needed for the study, but it was not available for reference. The following method was used to calculate the requisite but unavailable population size. It was provided that, 13,558 full-time fishers were the correct number of the population of fishers who were actively engaged in the two sectors. As portrayed in Table 1, an attempt was made to figure out the sector-wise distribution of full-time fishers in each sector. The average crew size of each sector was assimilated from various authentic studies gathered from CMFRI, and it was multiplied by the number of crafts.

Table 1 highlights that there was a disparity between the full-time fishers (12,851) and the stipulated total population size of full-time fishers (13,558). This discrepancy may be explained by the fact that shore seine fishing was practised by both the motorised and non-motorized sectors, resulting in average crew sizes of 44 and 40, respectively. Due to this mismatch, the craft proportion was taken into consideration rather than the population in order to evaluate the decent work dimensions of the fishers and to estimate the sample size of fishers. Only trawlers from the mechanised sector were observed to be in action at the time of

the pilot research in the Kollam district. According to the Kerala Marine Fisheries Census 2010 (Part II), of the crafts operating in the Kollam district, trawlers of mechanised crafts (950) and motorised crafts (546) were taken into consideration for the study. The sample size was computed using the craft Percentage at a 5 per cent level of significance, i.e., 306 crafts (112 motorised crafts and 194 mechanised crafts). The following steps were followed in order to compile the final craft-wise sample size of fishers

Initially, in order to identify fishers from the motorised and mechanised sectors, information on the number of fish landing centres based on the operation of the fishing vessel was first obtained from Kerala Marine Fisheries Statistics (2015) and Marine Fisheries Census (2010), as shown in Table 2. Secondly, information on craft owners based on landing centres was acquired from the Matysa Bhavan and various fisheries stations in Kollam. The craft size was calculated from all the landing centres based on the type of craft, displayed in Table 3.

Thirdly, senior crew members were selected as respondents for the survey using simple random sampling by the lottery method, with the assistance of craft owners (one crew member from each vessel (112 from the motorised sector and 194 from the mechanised sector). The interview schedule was designed to assimilate information from the fishers at the fish landing centres, including Thankassery, Wadi, Moothakara, Jonapuram, Quilon port, Pallithottam, Sakthikulangara, and Neendakara.

The decent work index construction was based on its theoretical literature, assigning equal weight to all its dimensions (Bonnet et al., 2003). A set of statements was formulated for each dimension on a 5-point Likert scale, and it was amalgamated into indices using the common formula  $(\text{Actual value} - \text{Minimum value}) / (\text{Maximum value} - \text{Minimum value})$  put forth by UNDP. The value of each index ranged between "0" and "1," with "0" denoting the lowest value and "1" denoting the highest value. The decent work index was created by calculating and combining the average values of all six indices. The decent work dimension indices as well as decent work index were segregated into three categories i.e., Low (below Mean – SD), Medium (Mean – SD to Mean + SD) and High (above Mean + SD).

### **Composite decent work index**

Based on the nature of fishing, the primary survey disclosed that among the surveyed fishers (306), in the motorized sector, all the respondents (100 per cent) embarked on single day fishing trips. About 9.8 per cent of the respondents in the mechanised sector preferred to

embark on fishing for just one day, whereas 90 per cent of the respondents went on multi days fishing expeditions. The decent work index for the motorized sector stood at 0.67, and that for the mechanized sector was 0.60. The fishers of the motorized sector enjoy an upper hand with regard to index position when compared to the fishers of the mechanized sector. This can be attributed to the favourable position enjoyed by fishers of the motorized sector with regard to employment, skill reproduction and representation indices (Table 4).

The Z-test is used to analyse the disparity in the index score among the fishers of motorized and mechanized sectors, and the test result is depicted in Table 9. It can be noted that the decent work index of motorized sector fishers is higher than that of mechanized sector fishers and the Z test illustrates that the difference is at 1 per cent level of significance. Thus the null hypothesis ( $H_0$ ), 'There exist no significant differences among the decent work dimensions of fishers engaged in commercial fishing operations' stands rejected.

### Concluding remarks

The decent work index thus arrived at imparts an insight into the level of decent work prevalent among the fishers of both sectors. It can be noted that a majority of the fishers (97.3 per cent from the motorized sector and 99.5 per cent from the mechanized sector) showcased a medium level of decent work (Table 5). The index portrayed that, the fishers of both sectors relished a medium level of decent work (Table 6).

<b>Table 1: Procedure of sample collection step 1</b>			
<b>Type of craft</b>	<b>Total crafts</b>	<b>Average crew size</b>	<b>Approximate population</b>
Non-motorized	299	4	1,196
Motorized	546	5	2,730
<b>Mechanized</b>			
(a) Trawlers	950	7	6,650
(b) Gill netters	5	9	45
(c) Ring seiners	35	62	2,170
(d) Liners	3	20	60
<b>Total</b>			<b>12,851</b>
<i>Source: Marine fisheries census 2010, cmfri publications 2009 &amp; 2011</i>			

<b>Name of landing centre</b>	<b>Mode of craft operated</b>	<b>Intensity of crafts (based on no. of crafts operated)</b>
Thankassery	Motorized	High (120)
Wadi	Motorized	High (130)
Moothakara	Motorized	Low (23)
Jonapuram	Motorized	Medium (70)
Quilon port	Motorized	Medium (40)
Pallithottam	Motorized	Low (20)
Sakthikulangara	Mechanized	High (500)
Neendakara	Motorized, Mechanized	123 (High), High (450)

*Source:* Secondary data (Marine census 2010, Kerala Marine Fisheries Statistics (2015))

<b>Name of landing centre</b>	<b>Mode of craft operated</b>	<b>Sample craft size</b>
Thankassery	Motorized	26
Wadi	Motorized	28
Moothakara	Motorized	5
Jonapuram	Motorized	15
Quilon Port	Motorized	8
Pallithottam	Motorized	5
Needakara	Motorized	25
Sakthikulangara	Mechanised	102
Needakara	Mechanised	92

*Source:* Marine census 2010, Kerala marine statistics (2015)



<b>Table 4:</b> Estimation of dimension indices and decent work index based on the nature of fishing									
Indices	Motorized				Mechanized				Z-test (p-value)
	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD	
Labour market security	0.55	0.95	0.68	0.08	0.25	0.90	0.63	0.08	-4.1 (<0.01)
Employment security	0.42	0.88	0.63	0.10	0.25	0.92	0.53	0.11	-7.5 (<0.01)
Income security	0.40	0.75	0.57	0.07	0.40	0.80	0.55	0.07	-3.3 (<0.01)
Work security	0.42	0.96	0.76	0.08	0.46	1.00	0.73	0.08	-3.0 (<0.01)
Skill reproduction security	0.35	0.95	0.71	0.08	0.35	0.95	0.63	0.10	-7.2 (<0.01)
Representation security	0.50	1.00	0.70	0.08	0.17	0.75	0.51	0.11	-12.6 (<0.01)
<b>Decent work</b>	<b>0.54</b>	<b>0.82</b>	<b>0.67</b>	<b>0.05</b>	<b>0.50</b>	<b>0.79</b>	<b>0.60</b>	<b>0.05</b>	<b>-11.1 (&lt;0.01)</b>

*Source: Estimated from primary data, 2018*

<b>Table 5:</b> Percentage distribution of respondents on the basis of decent work index		
Classification of decent work Index	Nature of fishing	
	Motorized	Mechanized
Low	---	0.5
Medium	97.3	99.5
High	2.7	----
Total	100.0	100.0

*Source: Estimated from Primary Data, 2018*

<b>Table 6: Level of attainment of decent work dimension indices</b>				
<b>Indices</b>	<b>Nature of Fishing</b>	<b>Level of decent work dimensions (Per cent)</b>		
		<b>Low</b>	<b>Medium</b>	<b>High</b>
Labour market security	Motorized	-----	97.3	2.7
	Mechanized	4.5	93.3	2.2
Employment security	Motorized	2.7	91.0	6.3
	Mechanized	54.1	45.9	-----
Income security	Motorized	13.4	84.0	2.6
	Mechanized	76.3	23.2	0.5
Work security	Motorized	22.4	77.6	-----
	Mechanized	31.9	68.1	-----
Skill Reproduction security	Motorized	0.9	74.1	25.0
	Mechanized	0.5	88.5	11.0
Representation security	Motorized	2.7	93.7	3.6
	Mechanized	15.4	83.6	1.0

*Source: Estimated from primary data, 2018*

## References

- Allison, E.H., Ratner, B. D., Åsgård, B., Willmann, R., Pomeroy, R., & Kurien, J. (2011). Rights-based fisheries governance: From fishing rights to human rights. *Fish and fisheries*, 13(1), 14-29.
- Anker, R. (2002). People's security surveys: An outline of methodology and concepts. *International Labour Review*, 141(4), 309-329.
- Aswathy, N. A., Shanmugam, T. R., & Sathiadhas, R. (2011). Economic viability of mechanized fishing units and socio-economics of fishing ban in Kerala. *Indian J. Fish*, 58(2), 115-120.
- Ben-Yami, M. (2000). *Risks and dangers in small-scale fisheries: An overview*. (SAP 3.6/WP.147), Geneva: International Labour Office.

- Bonnet, F., Figueiredo, J.B., & Standing, G. (2003). A family of decent work indexes. *International Labour Review*, 142(2), 213-238.
- Bruchell, B., Sehnbruch, K., Piasna, A., & Agloni, N. (2013). The quality of employment and decent work: Definitions, methodologies, and ongoing debates. *Cambridge Journal of Economics*, 38, 459-477. doi:10.1093/cje/bet067
- Chandra, N. (2009). Labour rights and the working poor. *The Indian Journal of Labour Economics*, 52 (3), 471-487.
- Chandrasekhar, C. P. (2016). *Macroeconomic policy, employment and decent work in India*. (Employment working paper no. 205), Geneva: ILO.
- CMFRI (2018). *Marine fish landings in India 2017*. Technical Report, Kochi: Central Marine Fisheries Research Institute.
- Conway, G. A., Lincoln, J. M., Husberg, B. J., Manwaring, J. C., Klatt, M. L., & Thomas. T. K. (1999). Alaska's model program for surveillance and prevention of occupational injury deaths. *Public Health Reports*, 114(6), 550-558.
- Desai, S. (2015). *Economic in commercial fisheries*. New Delhi: Random Publications
- EC (2016). *Commission staff working document: impact assessment*. Brussels: European Commission.
- FAO (2016). *Scoping study on decent work and employment in fisheries and aquaculture: Issues and actions for discussion and programming*. Rome: Food and Agriculture Organization.
- Georgianna, D., & Shrader, D. (2005). *Employment, income and working conditions in New Bedford's offshore fisheries*. New Bedford: Saltonstall-Kennedy Program, National Marine Fisheries Service.
- Ghai, D. (2006). Decent work: universality and diversity. In D. Ghai (Ed.), *Decent Work: Objectives and Strategies* (pp. 1-30). Geneva: International Institute for Labour Studies
- GOI (2012). *Kerala marine fisheries census 2010, Part - II* (6). Ministry of Agriculture, New Delhi: Government of India.
- GOI & ILO (2013). *India: decent work country programme, (2013-2017)*. New Delhi: International Labour Organization.

- GOI (1997). *Report on the working and living conditions of workers in marine fishing industry in India*. (Unorganized sector survey series no. 26), Ministry of Labour, New Delhi: Government of India.
- GOK (2015). *Kerala marine fisheries statistics 2015*. Director of Fisheries, Thiruvananthapuram: Government of Kerala.
- GOK (2013). *Socio economic survey of fisherfolk of Kerala 2013*. Director of Fisheries, Thiruvananthapuram: Government of Kerala.
- GOK (2015). *Kerala marine fisheries statistics 2015*. Director of Fisheries, Thiruvananthapuram: Government of Kerala.
- Hill, E. (2010). *Worker identity, agency and economic development: Women's empowerment in the Indian informal economy*. Oxon: Routledge.
- Howard, P. M. (2012). Sharing or appropriation? Share systems, class and commodity relations in Scottish fisheries. *Journal of Agrarian Change*, 12 (2 &3), 316-343.
- ILO (2013a). *Caught at sea: Forced labour and trafficking in fisheries*. Geneva: International Labour Organization.
- ILO (2016). *Fishers first: Good practices to end labour exploitation at sea*. Geneva: International Labour Organization.
- ILO (2017). *Decent work for migrant fishers: Report for discussion at the tripartite meeting on issues relating to migrant fishers*. Geneva: International Labour Organization.
- ILO (2017). *Decent work for migrant fishers: Report for discussion at the tripartite meeting on issues relating to migrant fishers*. Geneva: International Labour Organization.
- Kantor, p., Rani, U., & Unni, J. (2006) Decent work deficits in informal economy: Case of Surat. *Economic and Political Weekly*, 41(21), 2089-2097
- Kurien, J., & Paul, A. (2001). *Social security nets for marine fisheries*. (Working paper no. 318), Thiruvananthapuram: Centre for Development Studies.
- Larion, A. (2013). Major objective of decent work-ILO. *Ecoforum*, 2(1), 74-77.

- Lekshmi, S. P. S., Vipinkumar, V. P., Mahadevaswamy H. S., & Lingappa. (2014). Primary, secondary and tertiary sectors in marine fisheries of Karnataka, India: A socio-economic profile. *Asian Academic Research Journal of Social Sciences & Humanities*, 1(21), 32-50.
- Mehta, B. S. (2016). A decent work framework: Women in the ICT sector in India. *Information Development*, 32(5), 1718-1729.
- Mumby-Croft, R. (1999). The living conditions onboard UK distant-water trawlers, 1945-1970. *The Northern Mariner*, IX(4), 25-33.
- NCEUS (2009). *The challenge of employment in India: An informal economy perspective (Volume I - main report)*. New Delhi: Government of India.
- Nizami, N., & Prasad, N. (2017). *Decent work: Insights from India's IT industry*. New Delhi: Sage publications
- OECD (2012). *Better skills, better jobs, better lives: A strategic approach to skills policies*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264177338-en>.
- Parappurthu, S., & Ramachandran, C. (2017). Taming the fishing blues: Reforming the marine fishery regulatory regime in India. *Economic & Political Weekly*, LII(45), 73-81.
- Planning Commission (2012). *Report of the working group on development and management of fisheries and aquaculture for the XII five year plan: 2012-17*. New Delhi: Government of India.
- Pollnac, R. B., Poggie, J. J., & Cabral, S. L. (1998). Thresholds of danger: Perceived risk in a New England fishery. *Human Organization*, 57(1), 53-59.
- Rajeev, M., & Nagendran, P. (2018). *Decency of primary occupations in the Indian fishing industry*. (ICDD Working Paper No. 21), Germany: Kassel University Press.
- Reddy, N. (2005). Challenges of decent work in the globalizing world. *The Indian Journal of Labour Economics*, 48(1), 3-18.
- Roshan, M. (2016). *A study of migrant fishers from Andhra Pradesh in the Gujarat marine fishing industry*. (ICSF occasional paper), Chennai: International Collective in Support of Fishworkers
- Saha, D. (2012). Street vendors in Mumbai: An exploration within the framework of decent work. Ph.D thesis submitted to Tata Institute of Social Sciences, Mumbai.

- Salim, S. S., Sathiadas, R., Narayanakumar, R., Katiha, P. K., Krishnan, M., Biradar, R. S., ... & Kumar, B. G. (2013). Rural livelihood security: Assessment of fishers' social status in India. *Agricultural Economics Research Review*, 26, 21-30. Retrieved from <http://eprints.cmfri.org.in/>
- Salim, S. S., Narayanakumar, R., Sathiadas, R., Manjusha, U., & Antony, B. (2017). Appraisal of the socio-economic status of fishers among the different sectors in Kerala, south-west coast of India. *Indian J. Fish*, 64(1), 66-71.
- Sarkin, J., & Koenig, M. (2011). Developing the right to work: Intersecting and dialoguing human rights and economic policy. *Human Rights Quarterly*, 33(1), 1-42.
- Sathiadhas, R., & Prathap, S. (2009). *Employment scenario and labour migration in marine fisheries. Asian Fisheries Science*, 22, 713-727. Retrieved from <http://eprints.cmfri.org.in/>
- Sen, A. (1976). Famines as failures of exchange entitlements. *Economic and Political Weekly*, 11(31/33), 1273-1280.
- Shah, T.M. (2017). The skills milieu of India: Pathway to social inclusion and decent work. *International Journal of Research in Sociology and Anthropology*, 3(3), 16-31.
- Sharma, A., & Sethulakshmi C. S. (2019). Assessment of occupational hazards and usage of sea safety devices by fishers of Kerala, India. *Journal of Agro Medicine*, 24(4), 374-380.
- SIFFS (2017). *Study report: Sea safety incidents on the lower south west coast of India*. Thiruvananthapuram: South Indian Federation of Fishermen Societies.
- Simonovaa, M. V., Sankovab, L. V., Mirzabalaevac, F. I., Shchipanovad, D., & Dorozhkind, V. E. (2016). Assessment problems and ensuring of decent work in the Russian Regions. *International journal of environmental & science education*, 11 (15), 7608-7626.
- Srivastava, R. (2012). Changing employment conditions of the Indian workforce and implications for decent work. *Global Labour Journal*, 3(1), 64-91.
- Standing, G. (2002). From people's security surveys to a decent work index. *International Labour Review*, 141(4), 441-454.
- Vendramin, P. & Thirion, A. P. (2019). Redefining working conditions in Europe. In C. Gironde & G. Carbonnier (Eds.), *ILO @100: Addressing the Past and Future of Work and Social Protection* (pp.273-294). Leiden: Brill publishers

Wagner, B. (2011). *Rural development through decent work*. Geneva: International Labour Organization.

World Bank (2012a). *Hidden harvest: the global contribution of capture fisheries*. Washington DC: International Bank for Reconstruction and Development.