

RESEARCH ARTICLE

FISHER RELEVANT WELLBEING INDICATORS OF MIGRANT FISHERS IN SRI LANKA

Koralagama DN*

Department of Agricultural Economics, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka

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ABSTRACT

Wellbeing is a person-centered and community-specific concept thus unique for the considered community. Identification of wellbeing priorities is a pre-requisite for any development programs and policies to uplift the living standard of the populace. This paper explores gendered wellbeing indicators of small-scale migrant fishers in Negombo and Chilaw in the West coast, who are migrating to Mannar, Sri Lanka. Three-dimensional wellbeing approach was adopted to assess; material, relational, and subjective dimensions of wellbeing, considering objective and subjective aspects together with relationships. Mixed method approach was employed to glean data administering a questionnaire survey (n=142) and in-depth interviews (n= 15). Ranked wellbeing factors were analysed using weighted frequencies. Remarkably 14 out of 25 factors belong to material wellbeing; six relational; and five are subjective. Most of these material wellbeing factors (8/14) namely financial stability, sustainable fishing methods, lower operational costs are livelihood-related. Being a collective and community-based occupation, fishing households value social cohesion and collaboration within their communities in relation to relational wellbeing. Women perceived access to sea (weighted mean (wm) 0.4), children's education (wm= 0.32), and children's future (wm= 0.48) than fishermen (0.16, 0.24, and 0.27 respectively). Despite fishermen and women value family relationships (wm = 0.82 and 0.88) and peaceful environment for fishing (wm = 0.38 and 0.27) as important relational wellbeing factors, fishermen also value good relationships within their own society (wm= 0.17) and harmony with local fishers at the migratory site (wm= 0.17). Religious activities, a subjective wellbeing factor has been valued by women (25%) than men (7%). Thus, most of the wellbeing indicators are occupation-specific and gendered. The 4Cs-catch, community, children and church have been recognized as fisher-relevant gender-responsive indicators for migrant fishers in the west coast, Sri Lanka.

Keywords: gendered, material, relational, subjective, weighted averages

INTRODUCTION

Wellbeing is a term that explains social, political, and cultural contexts (Woodhouse et al. 2015; Weeratunge et al. 2014; Armitage et al. 2012), which goes beyond Human Development Index measures (McGregor et al. 2015; Stiglitz et al. 2009). Wellbeing addresses a broad-based outcome through an analytical lens including material and non-material aspects (Weeratunge et al. 2014:2). Wellbeing is the result of application and implementation

of social policies into development practices (McGregor et al. 2015) hence, informed as a process (Weeratunge et al. 2014; Coulthard et al. 2011; White 2010). Despite several studies have described wellbeing through psychological discourse (Bandarage 2013; La Placa et al. 2013; Wallace and Wheeler 2002) and subjective measures (Diner and Ryan 2009; Kroll 2015), recent studies have discussed its objective and subjective domains focusing on being, doing, and feeling of human beings (Weeratunge et al. 2014; White

Corresponding author: dilanthi@agecon.ruh.ac.lk

2010). This has been elaborated by Stiglitz and colleagues (2009) defining wellbeing as “*a signpost to shift emphasis from measuring economic production to measuring people’s lives*” (page 10) considering both objective and subjective aspects. Consequently, present literature explains wellbeing with a broader definition not only limiting to material wealth (assets) and psychological aspects (e.g. happiness) but incorporating social relationships, networks, beliefs, security, ideology, satisfaction, peace and all other aspects in day-to-day life (Weeratunge et al. 2014; Coulthard 2012; White 2010). Wellbeing in Developing countries research group (WeD) at Bath University, UK has introduced three-dimensional wellbeing approach enclosing both subjective and objective aspects together with relationships (McGregor 2009). Accordingly, S. White (2009) in the WeD group elaborates wellbeing over three dimensions as follows; having a good life with a desired living standard (material wellbeing), living a good life investing on relationships and capabilities (relational wellbeing), and constitute happiness by locating the person through experience, satisfaction, judgement, and subjectivity (subjective wellbeing). Alister McGregor, in the same WeD research group defines wellbeing as “*a state of being with others that occurs when human needs are met, where people and organizations may act meaningfully to accomplish their goals, and where they are content with their way of life*” (2007:3). Since then, the three-dimensional wellbeing approach has been widely used by scholars due to its understandability, simplicity, applicability, and practicality (Donkersloot et al. 2020; Woodhouse et al. 2015; Armitage et al. 2012; Pollnac et al. 2012; Smith and Clay 2010). The three dimensions of wellbeing- material, relational, and subjective are explained next.

Material wellbeing (MWB)

Material wellbeing (MWB) refers to the ‘standard of living’ (White 2010:163), possession, and endowments. All materialistic aspects including economic assets, occupations, income, health, education, amenities and all what a person needed for a better life have been described in relation to

MWB (Coulthard et al. 2011; White 2010; Gough and McGregor 2007).

Relational wellbeing (RWB)

Relational wellbeing (RWB) refers to relationships, networks, social interactions, memberships, power, identity, and governance (Coulthard et al. 2011; Gough and McGregor 2007). RWB covers components in social capital plus governance, justice and equality-related aspects. Social relationships are critical to pursue wellbeing that explains who gets what and why (White 2009).

Subjective wellbeing (SWB)

Wellbeing studies have been extensively carried out to assess subjective wellbeing (SWB) aiming for life satisfaction, happiness, and psychological wellbeing (Adler and Seligman 2016; Kroll 2015; Diner and Ryan 2009). SWB refers to the feeling of people on life and the way people assess their lives in relation to cognitive aspects (Gough and McGregor 2007). Values, ideologies, beliefs, perceptions, hopes, fears, aspirations, and life satisfaction are the profoundly used determinants in SWB (White 2010).

Material, relational, and subjective wellbeing are always interacting with each other (McGregor and Sumner 2010; White 2010) and are interdependent, hence influencing one over the other directly and indirectly (Pouw and McGregor 2014). Thus, wellbeing ought to be perceived via upliftment of all three dimensions to pursue a better life. Having identified the importance of wellbeing assessment in development studies (McGregor et al. 2015; Stiglitz et al. 2009), scholars attempt to incorporate wellbeing in assessing and formulating development policies in national and international agendas (Donkersloot et al. 2020; Leigh and Escande 2018; White et al. 2012). However, wellbeing is a people-centered, livelihood-specific concept (White 2010). Different communities prioritize different wellbeing aspects because wellbeing is socially and culturally constructed (Weeratunge et al. 2014). It iterates that the wellbeing aspects are almost common to everyone within the community but varies with geographical, societal,

institutional, identity, and cultural context (Weeratunge et al. 2014; White 2010). Wellbeing assessment, particularly for vulnerable and marginalized communities is a paramount importance to ensure macroeconomic goals and Sustainable Development Goals (SDGs) by the year 2030 (SDSN 2015). Capture fisheries is a vulnerable, resource-based livelihood with a myriad of economic, environmental, and social issues and challenges. Climate change, overfishing, poor governance, conflicts, and escalating competition over capture fisheries exacerbate the viability of small-scale fisheries (Fabinyi and Barclay 2022; Coulthard et al. 2011). Thus, wellbeing assessment is crucial, especially in marine capture fisheries in order to secure their livelihoods with a better living standard (Charles et al. 2012; Coulthard 2012). Sri Lankan small-scale fisheries is one such vulnerable community with numerous issues, which may affect directly and indirectly individual and community wellbeing. Overwhelming social, economic, ecological and political issues including seasonality, emerging overt and latent conflicts, governance-based issues and land grabbing jeopardize the living standard cum wellbeing. Thus, this study aims to unravel the most important wellbeing factors for small-scale migratory fishers to inform inclusive policies and development agendas.

Small-scale fisheries sector in Sri Lanka

Fisheries is an important sub-sector in the Sri Lankan economy contributing 1.1 percent to the national GDP. Marine fisheries sector, in particular, entails social and economic importance around the entire 1 770 km of Sri Lanka's coastline. Sri Lankan marine fisheries sector is predominantly a small-scale fishery where 60 percent of the fish production comes from coastal fisheries providing livelihood opportunities for 218,830 fishers including both men and women from 188,690 households. Direct and indirect employment opportunities provided by the sector are equivalent to 12 percent of the working population in the country (MFARD 2021). Ninety-one percent of fishing craft are small boats employed in small-scale fisheries.

Therefore, it is obvious that the small-scale fisheries sector is important as a provider of employment opportunities, foreign exchange generator and empower women in the coastal zone continuously facilitating the nutritional, economic, and social-wellbeing of more than one-third of the country's population. However, small-scale fisheries in Sri Lanka are vulnerable due to seasonality, climate change, natural and man-made hazards, and anthropogenic activities. Most of these issues are uncontrollable at the micro-scale. In fact, seasonal migration is practiced to cope with the adverse weather pattern from time immemorial (Stirrat 1988; SLNA 1868). Small-scale fishers, especially from the West and South routinely migrate to compatible areas (North and East) following monsoonal winds (*ibid.*; Koralagama 2020; Weeratunge et al. 2020). Seasonal migration is heavily adopted by fishers on the west coast, particularly from Negombo-Chilaw to Puttalam due to multiple reasons; caste-based occupation for generations depicting their own identity as fishers (Koralagama 2020), lacking of alternative livelihoods to be practiced during the off-season (Weeratunge et al. 2020), and with zero opportunity cost (Amarasinghe 1989). However, a myriad of issues has been reported against seasonal migrants in recent past (Koralagama 2020; Weeratunge et al. 2020). This claims a holistic interdisciplinary approach to address these fisheries-related issues (Charles et al. 2012). Scholarly literature available on poverty (Bene and Friend 2011), vulnerability and climate change (Allison et al. 2009), governance (Bavinck et al. 2015; Jentoft and Chuenpagdee 2015; Scholtens 2016), gender (Koralagama et al. 2017; Weeratunge et al. 2010) and blue justice (Koralagama and Bavinck 2022), but wellbeing assessments in fisheries are still lacking (Coulthard et al. 2011), especially on seasonal migration, which has considered as marginalized due to seasonality (Weeratunge et al. 2020), livelihood continuation issues and inter-community conflicts (Koralagama and Bavinck 2022). Being an integrated concept that addresses complex social and economic trade-offs in small-scale fisheries within the fisheries governance framework (Bavinck and

Vivekanandan 2011; Coulthard *et al.* 2011), wellbeing approach better suits to assess development requirements and pre-requisites for policy reforms. However, questions are still remaining on the ways to operationalize wellbeing in a meaningful manner in development agendas in different communities. Thus, this paper aims to explore fisher relevant wellbeing indicators in the purview of three-dimensional wellbeing approach- material, relational, and subjective aspects, which are useful in prioritizing fisheries-related development programmes and policy reforms.

The next section of this paper elaborates on the methodology adopted in data collection followed by the analysis with respect to three-dimensional wellbeing. Then, the findings are presented. The last section of the paper has dedicated to drawing meaningful inferences that end with the conclusion.

MATERIALS AND METHODS

Small-scale fishers residing in Negombo and Chilaw migrate to Mannar- SouthBar and Silavathurai annually. They operate Out-board Fiber Reinforced Plastic (OFRP) boats with gill nets targeting small-pelagic fish species namely herring, Smoothbelly sardinella, Shortfin scad, Indian mackerel and a few more. Small-scale fishers engage in coastal fishing up to 40 knots from the sea-shore. These fishing communities usually fish in the home region from May to October, during the South-west monsoon and migrate from October to April with the onset of the Northeast monsoon due to unfavourable (rough) weather. Most of these migrating fishing families live in Sea Street, Kudapaduwa, Palangathurai, and Kammalthurai in Negombo and Wella, Karukapane, and Muthupanthiya in Chilaw forming their own communities and fisheries

associations (for migrant fishers) under the main fisheries association in the area (National Fisheries Federation). A mixed method approach was adopted employing both quantitative and qualitative data collection methods including questionnaire survey (n=142) and in-depth interviews (n=15). Quantitative data is useful to assess fisher relevant wellbeing indicators while qualitative data to supports each indicator meaningfully for better understanding. A sample of 142 migrant fishers (both men and women) was drawn from a population of 710 migratory fishing households representing 20 percent of the sample. The sampling frame - fishing household lists available at the migratory fisheries associations- used to select the sampling units through simple random sampling technique. The study tried to get equal representation of men and women from each site. Sample composition of the survey is given in table 01.

Most of the wellbeing studies have adopted qualitative assessments (Bavinck and Vivekanandan 2011; Klasen 2007; Kroll 2015; Weeratunge *et al.* 2021) and few on quantifications (Donkersloot *et al.* 2020; Pollnac *et al.* 2012; Smith and Clay 2010). However, literature on quantifications of wellbeing indicators is lacking but the ranking method has been used by Donkersloot and colleagues (2020). Similarly, a ranking method was employed in this paper to determine fisher-relevant wellbeing indicators. However, the fisher relevant wellbeing indicators were extracted inductively where the respondents were asked to list the wellbeing factors during the questionnaire survey (*please state things/people/factors that you need to have a good life*). Listed wellbeing factors were ranked according to their priority. These ranks were considered as weights for each wellbeing

Table 1: Sample composition for the questionnaire survey

Home region/ Category	Negombo	Chilaw	Total
Male	50	26	76
Female	46	20	66
Total	96	46	142

factor. Accordingly, three marks were assigned for the first wellbeing factor, two marks for the second and one mark for the third. Then, the weighted frequency was calculated as per the formula below.

$$\text{Weighted frequency of wellbeing factor,} \\ i = (N_{i1} * 3) + (N_{i2} * 2) + (N_{i3} * 1) \\ \dots \text{Eqn. 01}$$

N_{i1} is the frequency of the wellbeing factor ranked in the first position, N_{i2} is the frequency of the wellbeing factor ranked in the second position, and N_{i3} is the frequency of the wellbeing factor ranked in the third position. Three, two and one are the weights given for the factors. Further, weighted means were calculated by dividing the weighted frequencies by the number of occurrences. This was performed separately for men and

women hence, “n” represents the number of men/women who came up with that wellbeing factor. The formula is given below.

$$\text{Weighted mean} \\ = (N_{i1} * 3) + (N_{i2} * 2) + (N_{i3} * 1) / n \\ \dots \text{Eqn. 02}$$

The results of these calculations are discussed next.

RESULTS AND DISCUSSION

Twenty-five wellbeing factors have been stated by migrant fishers (both men and women) giving different priorities. Weighted frequencies of the wellbeing factors were calculated based on the formula one (E.01). Prioritized wellbeing factors were listed and ranked in descending order for better visualization (Table 02).

Table 2: Wellbeing factors of migrant fishers according to weighted frequencies (n=142)

No.	Wellbeing Factor	Weighted frequency
1	Financial stability	128
2	Good relationship with family and relatives	118
3	Sustainable fishing methods	90
4	Children's education	89
5	Reduce operational cost	62
6	Improve fishing	56
7	Peaceful environment for fishing	44
8	House	36
9	Harmony with other fishers - Locals	36
10	Alternative opportunities in fisheries	25
11	Consumption - eat and drink	21
12	Mental satisfaction	20
13	Religious activities	18
14	Access to sea	17
15	Good relationship with own society	16
16	Go abroad	14
17	Acquire assets - non fishing	12
18	Fish selling mechanism	12
19	Raise respectable children	10
20	Good status in the society	10
21	Patience	7
22	Love and care	5
23	Physical health	4
24	Quality fishing equipment	1
25	Good environment for living	1

Source: Survey in Negombo and Chilaw

As per table 02, financial stability and family relationships have occupied the first and second positions with higher weighted frequencies. These two belong to material and relational wellbeing dimensions respectively. Except for family relationships and harmony among fishers (relational wellbeing), all other wellbeing factors ranked upto eleven represent material wellbeing. Six factors fall under relational wellbeing and five for subjective wellbeing. As the paper aims to explore and analyse fisher relevant wellbeing indicators based on the three-dimensions-material, relational, and subjective- and gender, the categories are elaborated next (Table 03).

Material wellbeing factors (MWF)

Nearly 56 percent of wellbeing factors are material (14/25*100). Of these, eight are

fishing-related wellbeing factors namely financial stability, sustainable fishing methods, lower operational costs, alternative livelihood opportunities in fishing, effective fish selling mechanism, quality fishing equipment and expansion of fishing in the future. In addition, housing, consumption, assets, health, children's education and foreign employment have been stated, which are much generic for any kind of occupation. The study reports that very few fishers are willing to a transformation (e.g. going abroad), yet the majority are looking for further improvements in the fishing occupation.

Despite the reduction of income due to declining catch per unit effort (CPUE), increasing operational cost with surging fuel prices, and conflicts with local fishers at the

Table 2: Wellbeing factors of migrant fishers according to weighted frequencies (n=142)

	Wellbeing Factor (Men)	Weighted mean	Wellbeing Factor (Women)	Weighted mean
Material	Financial stability	0.83	Financial stability	1.00
	Sustainable fishing methods	0.78	Sustainable fishing methods	0.43
	Reduced operational cost	0.49	Access to sea	0.40
	Improve fishing	0.46	Reduced operational cost	0.37
	Fish selling mechanism	0.34	Alternative opportunities in fisheries	0.33
	House	0.29	Childrens' Education	0.32
	Childrens' Education	0.24	House	0.20
	Consumption - eat and drink	0.21		
	Accessibility to sea	0.16		
Go abroad	0.15			
Relational	Good relationship with family and relatives	0.82	Good relationship with family and relatives	0.88
	Peaceful environment for fishing	0.38	Peaceful environment for fishing	0.27
	Good relationship with own society	0.17		
	Harmony with other fishers	0.16		
Subjective	Good future for Children	0.27	Good future for Children	0.48
	Mental satisfaction	0.16	Engage in religious activities	0.25
	Engage in religious activities	0.07	Build respectable children	0.15
			Mental satisfaction	0.12

Source: Survey in Negombo and Chilaw

migrating site, fishing households eager to migrate as a livelihood continuation strategy. Migration helps them to overcome huge income losses due to seasonality; during the off-season to the home region. Hence, stable financial opportunities have been prioritized by both men and women. Hindrance occurred due to illegal fishing (Indian trawler poaching, *surukku* netting, and dynamiting) results stock depletion and income losses. In fact, resource conservation for a long-lasting fishery has been claimed through sustainable fishing methods. Which has been prioritized as the second most important wellbeing factor. Poor catches urge fishers to sail far, thus operational costs increase, which is badly affected due to the soaring fuel prices. Distant sailing affects fish quality and fish prices. Further, the increasing incidents of craft and gear damages due to illegal fishing methods (trawling, brush piles, log fishing and galvanized pipe used stake nets) multiply the cost of fishing. The lower income stressed by higher operational costs dwindles the saving capacities, hence migrant fishers prefer lower operational costs, which ensures them a good return from fishing. Frustration due to illegal fishing has been explained in the quote below.

“We spend more than a hundred thousand rupees to migrate. We expect better income from fishing and dried fish processing during our stay. Actually, we could save a considerable amount of money in the past. Now we cannot earn that much due to Indian trawling and *surukku* nets. The stock has

depleted badly. Indian trawling disturbs the turbidity of the seawater; hence we have to sail far to catch fish. It increases our cost. Indian trawlers catch even the fry and the juvenile leaving an empty sea for us. So how can we get a good harvest in future? We cannot save now. Income does not cover expenditure. Our craft and gear damages are often due to illegal fishing practices. If everyone abides by harmless fishing techniques, we would have a better life” (fisherman from Negombo migrating to Silavathurai).

Migration substitutes hired labour with family labour. Fisher wives help with fish sorting, fish grading, net cleaning, net mending and fixing baits, which used to be done with hired labour, particularly in the home region. This saves operational costs while utilizing unutilised woman labour in the production process. Besides, dried fish processing has been practiced on the extended bare beach generating an extra income for the household. Therefore, easy access to the sea has been valued by women (weighted mean = 0.4) followed by alternative livelihood opportunities (wm = 0.33) than men. Moreover, effective fish selling mechanism with minimum middlemen involvement has been stated by fishermen (wm = 0.34). Prevalence and dominance of a number of middlemen in the fish supply chains influences fish price and marketability. Sometimes, fishers lose their bargaining power but accept what the trader offers. Hence, small-scale fishers expect a better life

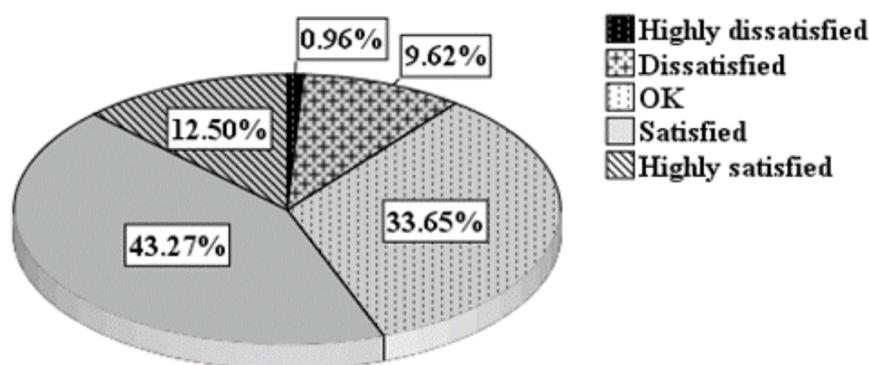


Figure 01: Satisfaction with *wadi* housing at the migratory site

Source: Survey in Negombo and Chilaw

through an effective fish selling mechanism.

Housing is one of the least prioritized wellbeing factors by men ($w_m = 0.29$) and women ($w_m = 0.2$). Migrant fishers live in temporary huts called ‘*wadi*’ at the migratory sites. These wadi are made up of coconut fronds but neither have electricity (unless they get power through generators or batteries) nor water supply. The sandy beach is the floor. In contrast, all of them have proper houses made up of brick and cement with most of the amenities at the home region. Amidst huge disparities, migrant fishers are largely satisfied (56%) with their wadi house (figure 01).

Reason for the satisfaction is well explained by the quote below.

“ In our wadi house, we do not have to pay any bills, simple, open, no fences, all the houses are similar and located next to each other. Our floor is the sandy beach. It is good for the health. We love this set-up than the closed and complex houses in Negombo” (fisherwoman from Negombo migrating to Silavathurai).

Enthusiasm for inter-connectedness has been mentioned indirectly through salubrious, wall-less wadi life. Despite the house being a social marker and a status symbol of material wellbeing, migrant fishers perceive houses in relation to a social environment. Thus, openness, simplicity, and togetherness have become attractions linking relational and subjective wellbeing aspects over material aspects.

Interestingly, most of the wellbeing factors, which are unrelated to the fishing occupation were put forward by fishermen. For example, housing (0.29) and consumption ($w_m = 0.21$) have been prioritized by men compared to women. In contrast, fisher wives value children’s education ($w_m = 0.32$) expecting their engagement in non-fisheries-related occupations. As such, men and women perceive wellbeing differently (table 03).

Relational wellbeing factors (RWF)

A good relationship with family and relatives, good relationship with own society, peaceful

environment for fishing, harmony with local fishers, love and care, and good environment for living are the prioritized relational wellbeing factors for small-scale migratory fishers in Negombo and Chilaw. Good relationship with family and relatives has been prioritized by both fishermen and their wives ($w_m = 0.82$ and 0.88 respectively). Spouse has become the wellbeing partner who absorbs all the sorrow, joy, and happiness. Family relationships were acknowledged as the base of happiness.

Being a community-centered livelihood, fishing needs better inter and intra community relationships for a healthy stay at the migratory site. However, multifaceted latent and overt conflicts are emerging at the migratory site in recent past, particularly in Silavathurai and SouthBar against the migration (Koralagama 2020). Thus, numerous destructive activities/sabotages against migrants’ arrival have been reported. Below quote describes a bad experience of a migrant fisherman in Negombo.

“I went to Silavathurai in August. At that time, the catch was gradually declining in Negombo with harsh winds. But, the locals in Silavathurai did not allow me to do fishing, instead grabbed my boat license and insurance without any authorized notice or prior information. They threatened me, not to do fishing until the 15th of October. So I returned home with empty hands. Still, they did not return my documents, although I made several visits to the fisheries regional office in Mannar. They rob our nets and belongings. Sometimes, block the road by putting logs and stones to stop our arrival”.

Most of these conflicts are not visible but appear silently. Social divisions based on ethnicity (Tamil, Sinhalese, and Muslims) are emerging with dictatorships, favouritism/biasness towards the ethnicity, and market dominance through formal and informal institutions. Hence, peaceful environment for fishing has been disturbed but immensely valued by men ($w_m = 0.38$) and women (0.27) ranking at the 7th with 44 weighted frequencies. Peaceful environment for fishing ensures migration and undisturbed livelihood

during the monsoon season to the home region. The way the migrant fishers secured these relationships are explained by the quote below.

“Although we know the people who are engaged in dynamiting and *surukku* net fishing, we do not complain against them. It would breach the unity in the society. We do not need to damage the good relationship we maintain with locals. Otherwise, they would not allow us to come here. We do not need to lose this land” (fisherman from Chilaw migrating to SouthBar).

The above quote proves the importance of migration to the migrant fishers despite the frustrations due to illegal fishing and conflicts prevailing at the migratory sites. Instead, migrant fishers expect uninterrupted migration to enlarge their wellbeing that led them for more interactive and tolerating responses/reactions ensuring good relationships with locals.

Subjective wellbeing factors (SWF)

Mental satisfaction, religious activities, raise respectable children, good status in the society, and patience are the stated subjective wellbeing factors. SWB factors of fisher wives are more focused on children where they wish good future for children ($w_m = 0.48$) and respectable children ($w_m = 0.15$) than men ($w_m = 0.27$). Children's education and future is critical for fishing families. The

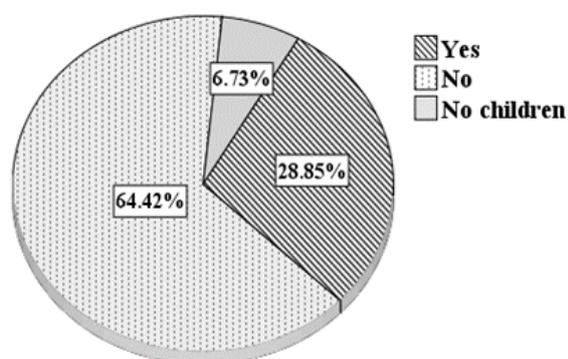


Figure 2: Perception on children's engagement in fishing

Source: Survey in Negombo and Chilaw

majority is reluctant to see their children in fishing (figure 02).

Approximately 65 percent of the sample expect to see their children in non-fisheries sectors such as jobs abroad, government sector, and service sector. About 29 percent has stated 'yes' because their sons/daughters are already in fisheries. Fishing is the last resort for most of the unemployed youth. On the other hand, many have started fishing as an adventurous journey, particularly at a younger age. They have been engaging in fishing for fun but eventually ended up fishing due to zero opportunity cost (lack of alternatives). There are few who joined fishing to support their father/family (with the demise of the household head). However, the ambition of fisher wives and men is to educate their children. Uncertainties in income, vulnerability, degrading social status, and all the hardships of climate change, hazards (ship disasters) and stock depletion deter newcomers due to the lack of rewards. This has been proven by the below quote.

“We can see how our husbands are working hard even for a little but uncertain income. We do not need to transfer the same fate to our children. We like to see them employed in good jobs. Even I migrate with my husband, I always encourage my children to study well. All our earnings are for their education” (fisher wife from Negombo migrating to Silavathurai).

Besides, women prefer to engage in religious activities ($w_m = 0.25$) compared to their husbands ($w_m = 0.07$). Fishing communities in Negombo and Chilaw (in the sample) are Roman Catholics. They attend Sunday Mass and evening prayers routinely. All the sorrows, loss of income, poor harvest, debt burden and pains are communicated to God, particularly by women. Feminism in gender roles has been well-depicted in this social behaviour. The attachment to the 'church' has been exhibited through the constructed temporary church with coconut fronds at the migratory site. A visiting priest has been invited for scheduled prayers that enable them to practice religious activities uninterruptedly

to strengthen their inner peace. Interestingly, fishermen also actively attend Sunday Mass at the migratory site compared to the home region (Participant observation) for blessings and secured livelihood at a distant land. In contrast, mental satisfaction has been acknowledged by men ($w_m = 0.16$) than women ($w_m = 0.12$).

Findings of the study unravel gendered wellbeing indicators perceived by men and women. Livelihood opportunities (eg. dried fish processing, fish sorting and grading), access to the beach, and social relationships have enlarged the wellbeing of migrant fisher wives. Multiple economic activities accomplished by women at the migrating site bring supplementary income to the household enabling savings and further investment in children's education. This has described in the quote below.

“We can do dried fish processing in Silavathurai due to bare lengthy beaches. In contrast, we cannot do fish drying in Negombo as we do not have access to the beach. Moreover, hoteliers in the neighbourhood complain about the bad odour. We do not have the power to argue with them. We lose a good amount of income, which could have been used as a supplementary for household expenses and children's education” (fisher wife from Negombo).

Women can observe fish landing and their husbands' arrival even from a distance at the migratory site. Wives serve food and tea to the fishing crew, which is not possible in Negombo and Chilaw where access to the beach or the landing site is not easy due to the distance. Women can see the catch, assist their husbands and sell at the migratory site. Further, women can choose fish for the curry on their opt, which is not possible at their home (participant observation). This proves the importance of access to the beach that enhances material (substitute hired labour), relational (love and care), and subjective (mental satisfaction by engaging in post-harvest activities) wellbeing of fisher folk allowing them to perform gendered responsibilities and obligations as fisher wives.

Stress, anxiety, and pressure on fishing families are high due to increasing zero-income days during the off-season. Being the shock absorber in the household, women mortgage their jewellery and other valuable assets to meet daily expenses. Migration positively responds to these insecurities, hardships, conflicts, and vulnerabilities. Income generation through migration helps them to save money for household expenses, to buy essentials, and to release mortgaged jewellery.

In essence, fisher-relevant wellbeing indicators are mostly livelihood-specific, community-focused, and gendered. Gendered relationships are interdependent upon relationships and SWB (Kawarazuka et al. 2016; Klasen 2007). Although the basic needs are poorly prioritized by both men and women, fishing-based factors were highlighted as essentials for a good life. These wellbeing factors represent MWB to a larger extent followed by RWB and SWB, thus all three-dimensions are crucial for a better life.

Accordingly, four main fisher relevant wellbeing indicators have been synthesised based on the wellbeing assessment undertaken in previous sections. The author labels these as 4Cs- Catch, Community, Children, and Church. Catch represents material wellbeing incorporating all the harvest/fishing-related wellbeing factors, which are more pronounced in table 02. Accordingly, financial stability, sustainable fishing methods, lower operational costs, alternative livelihood opportunities in fishing, effective fish selling mechanism, quality fishing equipment and expansion of fishing in the future are categorized into 'catch', which are highly correlates with the catch/harvest. Community represents inter and intra community harmony and networking that enable migration and fisheries-based livelihoods, which is impossible without community support. Accordingly, good relationships with family and relatives, good relationships with own society, peaceful environment for fishing, harmony with local fishers, love and care, and good environment for a living are concerned. Collectivism, sharing, caring, security, and support for the

fisheries-related livelihoods have been included in the 'community' wellbeing indicator. Next, 'children' denote the future of fishing households indicating why they fish, their expectations, and what they pursue. This covers subjective measures of their livelihood. Moreover, the glue of community cohesion, i.e. satisfaction, beliefs, ideologies, networking, and acceptance is pursued through religiosity. Thus, 'church' is named as the fourth wellbeing indicator, which is also related to the subjective domain but partially to the relational aspects. Fishing communities have perceived these four as critical and crucial aspects of a better life.

Despite wellbeing being a practical approach (Armitage et al. 2012; Pollnac et al. 2012), its use in policy decisions and implementation is heavily dependent on data availability and context-specific wellbeing indicators (Breslow 2015; Hicks et al. 2016; Smith and Clay 2010). Further, wellbeing depends on the level of possessiveness, community bonds, social capital, governance and many more (Donkersloot et al. 2020) yet differs based on individuals and communities. Therefore, gendered fisher-relevant wellbeing indicators presented in this paper would be a pre-requisite for wellbeing assessments in policies and development programmes in Sri Lankan small-scale fisheries. Hence, prior assessment on fisher-relevant wellbeing indicators (4Cs) is recommended for policy formulations, policy reforms, decision-making, and for development projects in small-scale fisheries.

CONCLUSION

This study answers the research question, how has the wellbeing perceived and pursued by migrant fishers in Negombo and Chilaw? Wellbeing factors mentioned during the questionnaire survey were analysed based on weighted frequencies. Given the scale of preferences, weighted frequencies were calculated, which is more realistic than frequencies. Weighted frequencies consider the ranks depending on the importance to the respondent. Twenty-five wellbeing factors have been stated by men and women. Of these, 14 are material wellbeing factors

including financial stability, sustainable fishing methods, lower operational costs, alternative livelihood opportunities in fishing, effective fish selling mechanism, and quality fishing equipment. Good relationships with family and relatives, good relationships within own society, a peaceful environment for fishing, harmony with local fishers, love and care, and good environment for living are the prioritized relational wellbeing factors. Both material and relational wellbeing factors are basically focused on fishing livelihood and fishing-based communities. Despite subjective wellbeing being more generic, those have aimed at children's education and their future, especially by women. Further, the weighted means exhibit the gendered nature of the wellbeing factors where fishermen and their wives perceived and pursued wellbeing differently. The analysis unravels four broader categories, the 4 Cs – catch, community, children, and church as the fisher relevant wellbeing indicators in small-scale fisheries in Western Sri Lanka. Evaluation of these wellbeing indicators or impact assessments is crucial in small-scale fishing communities prior to any development programmes or policy initiations. More specifically, a healthy eco-system (marine) with proper implementation of rules and regulations, actions against poaching, interactive governance mechanism for better inclusion of the excluded (to safeguard the social harmony and peace among fishing communities), and education facilities including vocational training and informal education opportunities are recommended, which would ensure a better life of migrating small-scale fishers in the west coast of Sri Lanka.

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