

## Full paper

# An Assessment of Wellbeing Priorities of Small-scale Migratory Fishing Communities in the West Coast, Sri Lanka

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### Abstract

Identification of wellbeing priorities is a pre-requisite for successful development programs. Wellbeing assessment has become ever-challenging yet crucial in development studies, especially in achieving macroeconomic goals. This paper presents a descriptive assessment method to identify unmet wellbeing priorities, which may provide valuable and meaningful insights on development needs and frustrations. Assessment has been conducted assuming the perceiving wellbeing as a gap between an individual's necessities (aspiration) and level of satisfaction. There, development frustrations and goal achievements have been explored with respect to the small-scale migratory fishers in the west coast, Sri Lanka. A sample of 142 fishers (25% of the migrant fishing population in the west coast) was drawn randomly from the lists of fisheries associations in Negombo and Chilaw, who are migrating to Mannar, in the North. The necessities and satisfactions were assessed based on a 3-point and 4-point Likert scale and the mean scores were calculated and ranked. Differences between the mean score rank of the wellbeing necessities and mean score rank of satisfaction were calculated. The negative difference indicates development frustrations, and the positives are goal achievements. Indian trawling issue, illegal fishing, financial uncertainty, cost of fishing, fish pricing mechanism, patience, conflicts, and physical health are the unmet wellbeing priorities with negative ranks. Migration has enabled easy access to sea, smooth consumption, diversified livelihood opportunities, good family relationships, and a few others with a positive difference – the goal achievements. Implementation of rules and regulations encouraging sustainable fishing techniques, regulations against poaching, adequate market linkages and effective pricing mechanism to control unhealthy price fluctuations, an interactive governance system including locals and migrant fishers, and frequent health clinics are recommended.

Keywords: Development frustrations, goal achievements, migratory fishers, wellbeing priorities

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### Introduction

Development measures are expanding their boundaries from narrowly defined poverty approaches to broadly defined wellbeing approaches [1, 2, 3]. Thus, development studies are moving ahead from poverty analysis to wellbeing analysis enveloping cultural, political, structural, and socio-economic standpoints [1]. Exploring and enlarging the understanding of needs and wants proclaims that people have goals, which need to be satisfied in order to pursue their wellbeing [4] or in other words quality of life [5, 6]. However, identification of context-specific wellbeing priorities, level of satisfaction, and wellbeing assessments are yet to be explored. In addition, unmet necessities are crucial to investigate in achieving the wellbeing of marginalized communities in order to attain the Millennium Development Goals (MDGs) [7, 8] and Sustainable Development Goals (SDGs) [9]. Seasonal migrant fishers [10, 11], pastoral societies [12],

nomadic farmers [13], and climate change victims [14, 15] are some of the marginalized and vulnerable communities that need special and immediate attention in the development discourse. Policy reforms are required to address unmet/unsatisfied goals and needs that would ensure the wellbeing of people.

Development has been perceived as a multi-dimensional phenomenon [16, 46] recognizing the importance of present wellbeing and its long-term sustainability [17]. Taking development beyond the GDP [18], many scholars have iteratively mentioned development not just as living better (objective and subjective aspects of wellbeing) but also living together in a better way [19, 20, 21, 22]. Despite poverty consists largely of its objective constructs (*What people have and do relative to absolute poverty*), subjective constructs (*how people think and feel within their social context*) are inadequately addressed (23: 617). Yet, poverty analysis is increasingly carrying out in developing countries for more than three decades with household surveys [24] due to convenient and familiar assessment methods.

In the recent past, wellbeing has iteratively pronounced in international development discourses with its subjective, relational, and objective domains [1, 21, 22] with multiple assessment procedures and tool kits [23, 25, 26]. Accordingly, satisfaction with objectives and wants; quality of life that people experiences, and psychological disciplines have been profoundly researched (27, 28, 29, 30] because wellbeing assessment and priority identification contribute to international development in four ways [25] *viz (i) it offers discursive space for analyzing conflicting policy priorities in determining wellbeing priorities and frustrations; (ii) it offers positive psychology in measuring what matters most to individuals; (iii) it analyses opportunities and obstacles for policy reforms; and (iv) it strengthens decentralization in the way development is managed* (Page: 577). McGregor [31] 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*” (page 3). The definition provokes the importance of needs and wants, level of satisfaction, and the level of achievement as a condition of wellbeing, which has been indicated subjectively in Quality of Life (QoL) measures. Measurement of subjective wellbeing has a long history including self-determination theory [3, 32], life satisfaction [33], satisfaction with life scale (SWLS), [29, 30], life domains [26], Patient Generated Index – PGI [6] and few more [47]. Therefore, wellbeing assessments are emerging in different regions, especially in developing countries.

### **Use of Wellbeing as a Development Assessment Tool**

Being a person-centered concept, wellbeing needs to have a social definition and proper assessment methods to inform in inclusive policies [3]. Yet, a number of scholarly literatures have presented its difficulty for practical usage and implementation [2, 34]. Consequently, wellbeing in developing countries (WeD) research group of Bath University, UK has introduced an individualized Global Person Generalized Index (GPGI) and the weighted goal attainment tool (WeDQoL) as wellbeing assessment methods [35]. Further, they have proposed a method to assess development priorities to ensure wellbeing of individuals and communities [36: 3]. A bottom-up approach that avoids the worst excess of paternalistic initiations, which authoritatively decides what people need and what authorities are going to be given [37] has been recommended [3, 25]. Wellbeing assessment studies have been conducted by WeD research group in Lima [38] and in rural Ethiopia [39] to identify the expressed needs and priorities. Another study has been carried out by Biswas-Diener and Diener [28] and Diener [30] to assess needs fulfillment and life satisfaction among homeless people in Calcutta and California. Since wellbeing research is instrumental in the international development discourse [40:69], a coherent and precise reconciliation between objective and subjective

aspects are crucial. Thus, this paper aims to explore wellbeing in the development context with reference to small-scale migrant fishing communities in Negombo and Chilaw, on the west coast of Sri Lanka.

### **Small-scale Migrant Fishing Community in the West Coast in Sri Lanka**

Small-scale fishers on the west coast of Sri Lanka, particularly from Negombo to Chilaw migrate to North and East coasts with the onset of the Southwest monsoon (May/September to March/April). This time period is the off-season for their home region due to harsh weather, monsoon winds, and lack of compatible nets to be employed for the target fishery; hence lucrative harvests are rare. Therefore, migration is practiced as a coping strategy for the continuation of fishing livelihood during the off-season as the fishers find fewer opportunities to engage in other livelihood sources. Small-scale fishers in Negombo and Chilaw employ Out-board engine Fiber Reinforced Plastic boats (OFRP) with gill nets and/or hook and lines in near-shore area. The target fishery is small pelagic fish species (for example sardinella, big eye scad, smooth-belly sardinella). Migration is a routine behaviour practiced by these communities for centuries [41,42]. Small-scale fishers in Negombo and Chilaw- on the west coast of Sri Lanka, seasonally migrate to Mannar and Mullaithivu Districts on the North and East coasts respectively. Most of them migrate as families but some only with a crew member (a helper), especially if the fisherman cannot accompany his wife due to family commitments. They live in temporary huts constructed on the beach with coconut leaves and sticks. Migrant fishing community exhibits a similar identity with local fishers in the host region where both communities are Tamil-speaking Roman Catholics but belong to two ethnicities; Sinhalese and Tamils respectively. Remarkably, their complexions are also similar. Despite the migration continuing even during the war (prior to 2009), presently migrant fishers encounter a number of obstacles, especially during the post-war period (since 2009), which erupts as conflicts with local fishermen. Escalating conflicts between locals and migrant fishers deter the migration process making most of the migrants unoccupied and frustrated. This calls for wellbeing issues in inter and intra-communities due to uncertain fisheries-based livelihoods and a lack of alternatives for the off-season. Despite there being some studies on wellbeing and fisheries in Sri Lanka [48], research has not been conducted addressing the seasonal migration issues and conflicts in small-scale fisheries in particular. Zooming through a wellbeing lens, the phenomenon was assessed to unravel the wellbeing pursued by migrants together with frustrations (the assessment was conducted as a part of a larger Ph.D. research). This paper reveals one assessment method that can be adopted in assessing wellbeing priorities and development frustrations.

### **Methodology**

Wellbeing and QoL tools are participatory, professionally accepted tools for data collection with more closely endorsed closed-questionnaire [1, 3, 5, 17, 22, 24, 25, 35, 43]. Measurement of individual perceptions follows collective and participatory appraisal methods through bottom-up approach, thus more nuanced analysis has been permitted. The WeD group has tested this tool in four key developing countries namely, Bangladesh, Ethiopia, Peru, and Thailand [4]. Similarly, a list of 24 wellbeing factors had been drawn through a study conducted in the same community during the same time period [44]. A sample of 142 fishers was drawn randomly from 570 migrant fishing households representing 25 percent of the total migrant population (N= 570). Lists of migrant fishing households available at fisheries associations in respective areas (fishers need to be members of the association in order to get the migration permit from the District fisheries office) were used as the sampling frame. A questionnaire survey was administered to

obtain the level of necessity for given wellbeing factors followed by the level of perceived satisfaction. The necessity and satisfaction were qualitatively measured using three-point (very much necessary (3)-necessary (2)-not necessary (1)) and four-point (Satisfied (4)-Just ok (3)-not satisfied (2)-do not have (1)) Likert scales respectively. Mean scores of necessities (Mean (N)) and satisfaction (Mean (S)) were ranked separately. Next, the differences between ranks were calculated using the following formula.

$$\text{Wellbeing gap} = \text{Mean Rank (S)} - \text{Mean Rank (N)} \quad \text{Equation (1)}$$

The negative values indicate ‘development frustrations’ [3:23]; this means the satisfaction rank is higher (less satisfied) than the necessity rank, which indicates an unmet or partially fulfilled necessity. Positives denote the satisfying aspects. In addition, key informant (KI) discussions (n=08) with office bearers of the fisheries associations (two fisheries associations), elderly fishers and fisher wives, and local fishers were held. In-depth interviews (n=15) were conducted with both fishermen and wives who were available to talk and elaborate for meaningful interpretations. NeThe next section elaborates on results zooming into development frustrations and goal achievements due to migration.

**Results and discussions**

Mean scores and ranks for the necessities and goal achievements (satisfaction) are listed in Table 01.

**Table 01: Mean rank differences of the listed wellbeing factors of small-scale migrant fishers**

Wellbeing items	Mean (N)	Rank (N)	Mean(S)	Rank (S)	Difference
Stop Indian trawling	1,98	2	1,07	24	-22
Stop illegal fishing techniques	1,92	14	1,19	23	-9
Financial certainty	1,95	11	1,93	18	-7
Cost of fishing (nets/gears/fuel)	1,98	5	2,55	12	-7
Pricing mechanism	1,95	12	1,64	19	-7
Patience	1,99	1	3,15	7	-6
Free from conflicts	1,97	6	2,79	11	-5
Physical health	1,96	8	2,51	13	-5
Dedication and commitment to the fishing job	1,98	3	3,35	5	-2
Ability to save	1,78	20	1,21	20	0
Improvement in fishing	1,85	18	2,08	17	1
Children’s education	1,89	15	2,36	14	1
Acquire assets (Jewelry, three wheelers)	,97	24	1,20	22	2
Alternative job opportunities (dried fish processing)	1,08	23	1,20	21	2
Peace and unity among the migratory fishers’ community	1,98	4	3,82	2	2
Housing	1,83	19	2,18	16	3
Good family relationship	1,96	7	3,65	4	3
Love and Caring (spouse and children)	1,96	9	3,26	6	3
Well-mannered obedient children	1,93	13	3,05	8	5
Engage in religious activities	1,95	10	3,89	1	9
Peace and unity within own community (migrant fishers)	1,74	21	2,95	10	11
Food consumption/Drink/ entertainment	1,70	22	3,01	9	13
Easy access to sea	1,88	16	3,74	3	13

(Source: Fieldwork)

Table 01 reveals nine unmet wellbeing priorities with negative rank differences and 15 with positives enlarging their satisfaction over necessity ranks due to migration. Indian trawling, illegal fishing, financial certainty, cost of fishing (nets/gears/fuel), and fish pricing mechanism are the prioritized livelihood-related wellbeing factors with a negative rank difference. Besides, patience, a conflict-free environment for fishing, physical health, dedication, and commitment to the fishing job carry negative values indicating relatively a lower level of wellbeing gaps. Remarkably, saving ability has no wellbeing gap, which has been ranked at the 20<sup>th</sup> position in necessities and satisfaction showing the lethargic nature in terms of money management in fishing communities.

Being small-scale migrant fishers, the fishing community expects to have a sustainable fishery yet loopholes are prevailing. Poaching, which is largely practiced by Indian trawlers has been indicated as the most severe development frustration. The impact of the Indian trawling issue is many folds; it i) reduces present and future fish stock; ii) destroys fish breeding habitats; iii) increases the turbidity level of the sea- chasing away the small-pelagic in near-shore; iv) increases operational cost; v) damages craft and gear (tear nets); and vi) life-threatening [10; 44]. As this is transboundary fishing, crossing over the international maritime boundary line (MBL) enforced by the Sirima-Sastri Pact [45], can be considered as illegal, unreported, and unregulated (IUU) fishing. However, the government plays a naïve role due to the power imbalance between India and Sri Lanka. The vexation of Indian trawling is explained by the quote below.

“Last year we stayed 4 months in Silavathurai, but could not recover the fuel cost at least. We lost approximately 200,000 LKR<sup>1</sup>. I had to mortgage jewelry worth 5 sovereign of gold to pay back the fuel cost, which we borrowed from the fish merchant. We could not recover it either. The main reason is Indian trawling. They sweep the sea leaving nothing to fish. They catch the small fry and juvenile. They destroy our sea. We cannot expect a good income even in the future. We are worrying about our future” (Fisher wife from Negombo migrating to Silavathurai).

Next, the development agenda needs to be focused on illegal fishing. Both local and migrant fishers engage in illegal fishing. *Surukku* nets, dynamiting, and stake nets with galvanized pipes are mostly practiced by local fishers. Besides, light fishing and brush piles in the near-shore area are largely employed by migrants (KI discussions). Fishers’ engagement in illegal fishing is obvious and common in the absence of proper sources of means for a better life, especially due to declining resources, lower prices, and income.

Financial certainty, cost of fishing, and pricing mechanism bear an equal level of wellbeing gap (Mean rank diff = -7), which are inter-related and depend on one another. Increasing operational costs and competitive markets with a number of middlemen shrink the profitability of the fishing occupation. Thus, financial certainty is challenged (see the quotes below).

“Fuel prices are skyrocketing. We need at least 40 liters of kerosene for one fishing trip. We are unable to do fishing due to prevailing economic crisis coupled with the surging fuel costs. Prices of nets, fiber and all the accessories are drastically increasing. Good income is only a dream. We are unable to bear the cost of fishing” (Fisherman from Chilaw migrating to SouthBar).

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<sup>1</sup> 200,000 LKR = 800 USD at a rate of 250 LKR per USD (this rate is used throughout this paper)

Fishers complain about the pricing mechanism due to powerlessness at the fish market. Being outsiders to the region, migrant fishers have been discriminated from the recent past (KI discussion). The migrant fishers do not have the freedom to sell their harvest to the desired buyer but have to sell through a commission agent, who is often from the host region and vice versa (an outside trader cannot approach the fisher directly but has to go through a local commission agent). They charge a commission of 200 LKR (0.8 USD) per kilo but without any value addition. An effective selling mechanism, which allows free trading is requested. Fishers believe that fair trading, fair prices, and lesser middlemen involvement would bring a better return for their harvest and sweat.

Patience has been recognized as an important and essential subjective wellbeing factor for a better life [21, 22], especially in community-dependent occupations including fishing that need others' support and collaboration. In fact, the migrant fishing community has always acknowledged and valued inter and intra-community harmony and peace. On the other hand, fishers always struggle with harsh weather, risk, and uncertainty. Thus, they are assumed to be aggressive (KI discussion). Besides, patience is also essential for survival at the migratory site. Most of the local fishers oppose on migration. Conflicts between locals and migrants would voice against migration jeopardizing fisheries-based livelihoods. Thus, patience has been ranked at the 7<sup>th</sup> position indicating as a factor to be achieved in order to have a better fishing life with a migratory phase. In contrast, the frustration of the local fishers towards migrants has been presented by the quote below.

“This is the only season we can do fishing. The migrant fishers engage in fishing at their home towns during the season and continue here during the off-season. They fish throughout the year. Being Tamils, we do not have that privilege. We cannot go down south for fishing. They catch our fish. It reduces our harvest and income. They should not come to our place. This sea is ours” (Local fisherman from Arippuwa).

The annoyance sometimes erupts as sabotage of boats, fights, petitions, stealing, and restrictions even on access to drinking water (KI discussions). Thus, a welcoming environment without conflicts and restrictions has been ranked as the 6<sup>th</sup> important wellbeing factor yet ranked at the 11<sup>th</sup> in terms of satisfaction. The negative rank difference labels it as a development frustration. Similarly, physical health, dedication and commitment to the fishing occupation carry negative differences, indicating unsatisfaction compared to the level of necessity.

Small-scale fishers often suffer from back pain and sight-related issues. Fishers have to pull boats to the landing site and push boats at launching. On the other hand, fishing is a collective occupation where the support of the community is crucial. In fact, one person may help many boats. Inserting heavy force on hauling boats up and down results in back pain in the long run. Further, fishing is a hard job with sleepless nights, under the sea breeze and waves. In fact, fishermen usually retire in their early 50s, but some may continue due to the worse economic status of the household but with much risk and difficulties. Thus, the fishing occupation claims physical strength and power to struggle with the giant waves and all the hardships. Realizing the importance, the fishers have ranked physical health as an important wellbeing factor but the level of satisfaction has not been achieved.



Besides the development frustrations with negative differences, there are many positive differences (necessity rank > satisfaction rank) indicating goal satisfaction due to migration. Those are; easy access to the sea, food consumption, harmony within their own community, religiosity, good family relationships, love and caring, and peacefulness.

Migration has enabled alternative income generation activities, especially for women where they can engage in post-harvest fishing operations (sorting, grading, net cleaning, and net mending) and dried fish processing. Dried fish processing at the home region (Negombo and Chilaw) is challenging, especially for women folk due to lack of space for drying, distance to the landing site that incur further cost to carry the fish stock up and down, and restrictions imposed by the hoteliers due to the smell. In contrast, women are eager to migrate as they have a spacious beach for fish drying, easy access to fish stock, and the support rendered by the neighborhood. Alternative income generation would strengthen the financial status of the fishing household in three ways. Firstly, the hired labour can substitute for women labour in the household; secondly, conserve their bargaining power at selling fish without becoming victims of lower prices due to middlemen intervention where women have opportunities for dried fish processing; thirdly, women can generate supplementary income by dried fish processing, which is not possible at the home region due to lack of space, distance to the fish landing sites, and the congested environment with high population density in Negombo and Chilaw. Women utilize this extra income to buy jewelry, the most liquidized asset they acquire. Hence, these wellbeing factors have achieved higher satisfaction due to migration.

Being migrants in a foreign land, fishing households demonstrate unity and harmony. Sharing is common within their own communities. Their needs want and difficulties are collectively achieved and shared. This has well explained by the following quote.

“Here, in Silavathurai, we all live as one family irrespective of where we have come from. Earlier, we did not have a church but we collectively built a temporary church for our prayers. Now the Sunday mass is conducted without any disturbance. Top of all, sharing is more plausible here than in Chilaw. If one caught a seer fish or received wild boar meat, we share it with all. We sell fish after offering all, especially those who returned without fish. In that sense, we are pretty sure that we are secured with fish for all three meals. In contrast, no one knows about our dishes at home” (A fisher wife from Chilaw).

Adopting a more sharing and caring lifestyle with the neighbourhood, the migrant fishers are fond of their relationships, especially within their own community with a positive rank difference. Proximity to the landing site enables fisher wives to serve their husbands tea and breakfast. Further, they are allowed to choose whatever fish they prefer to cook. Hence, family relationships are more secure with love and care for each other at the migratory site. In addition, the fisher wives believe good income would brighten the future of their children.

The findings clearly indicate that some of the prioritized wellbeing factors are well achieved and some do not. Most of the development frustrations are occupation-related, which has been classified as material wellbeing [21, 22].

The results are identical to the study carried out in Peru [25: 584] with 550 households where occupation-related wellbeing priorities carried negative differences indicating frustrated aspirations. Therefore, the inductive identification and analysis of the wellbeing priorities through bottom-up approach elicits community-specific needs and wants to have a better life. Further, the study unravels the importance of higher-scale satisfaction on occupation-related factors in order to pursue the interconnected and interrelated wellbeing aspects. There, external interventions through development programmes, projects, and policy reforms can largely support these gaps, hence the focus of such development programmes can be well-shaped by adopting the proposed methodology. In essence, goal importance (necessity) and goal achievement (satisfaction) can use as key players in poverty analysis, wellbeing analysis as well as in development studies. Further, the method repeated in this study confirms its applicability to multi-dimensional approaches in measuring development needs rather than limiting to a single measurement. Unlike the externally driven Human Development Index or Millennium Development Goals (MDGs), this method allows one to think and feel about people's lives [33] through bottom-up approach, which is participatory and context-specific.

OECD [20] states "the central purpose of economic policies is to improve people's lives. We need to rethink how to place people's needs at the heart of policy-making". The method proposed in this study is crucial in making lives better by correctly identifying unsatisfied needs and wants development frustrations, and level of fulfillment, which needs to be the focus of governing bodies.

Therefore, solid rules and regulations against poaching and illegal fishing are of paramount importance with better implementation. Financial management, savings, and credit schemes would empower fishing households with adequate capacity-building programmes to ensure financial health. Government has to take appropriate actions to reduce operational costs by offering fuel at a subsidized price. Further, an effective fish-selling mechanism is advisable with lesser middlemen intervention, especially allowing free and fair trading. Community harmony, and inclusion of all the stakeholders into an interactive governing regime is recommended. Moreover, the method can be extended to assess social wellbeing by determining the community-based wellbeing gaps. Hence, application in Focus Group Discussions (FGDs) is possible. Members from a homogenous community can be summoned at an FGD in order to list out the most important things/people/relationships for a better life. Then, the respondents can come up with locally defined wellbeing factors, necessities, and aspirations across multiple life domains [23]. The listed factors need to be written on cards and ask to arrange in descending order based on necessity/importance. The position/rank of the card needs to be recorded. Next, the same card set can be arranged based on the level of satisfaction depending on the present situation and get the rank/positions. The difference can be calculated according to the above equation. The difference depicts the wellbeing gaps in the community.

## **Conclusion**

The paper aims to introduce a wellbeing assessment method that can be fed into development programmes. The empirical study unravels the unmet wellbeing priorities; Indian trawling, illegal fishing, financial uncertainty, fishing cost, fish pricing mechanism, patience, free from conflicts, and physical health. In contrast, accessibility to the sea, food consumption, alternative income generation, unity within the migrant community, and religiosity are the goal achievements with higher satisfaction. Thus, institutional involvement is recommended to resolve the frustrations including actions against Indian trawling (poaching), monitoring and surveillance of illegal fishing practices, fair trading mechanism, and interactive



governance mechanism including all the stakeholders for effective utilization of the fisheries resources. Further, government patronage health clinics are recommended. These unmet but essential wellbeing priorities need to be the national concerns and priorities with respect to the considered community, hence recommended in formulating context-specific inclusive policies.

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