

The involvement of female labor in seafood processing in Sri Lanka: impact of organizational fairness and supervisor evaluation on employee commitment

D.A.M. De Silva

M. Yamao

Department. of Food and Environmental Economics

Graduate School of Biosphere Sciences

University of Hiroshima, 1-4-4 Kagamiyama

Higashi Hiroshima, 739-8528, Japan.

achini_lk@yahoo.co.uk and yamao@hiroshima-u.ac.jp

Abstract

The expansion of fish export has been associated with the feminization of the fisheries labor force. This paper addresses women's roles in the fish processing sector in Sri Lanka. The impact of organizational fairness and supervisor evaluation perceptions on worker commitment were the central themes examined in the study. Data were gathered from a 35-item questionnaire based on the 7-point Likert scale questions. Fifty randomly selected women workers from 10 seafood processing firms located in the west and north-west provinces of Sri Lanka were canvassed to assess their perceptions of fairness, the evaluations of their supervisors and their commitment levels. The impact of organizational justice and supervisor evaluation scales on employee commitment was subject to hypothesis testing. Results of the multiple regression analysis indicate that fairness is a significant predictor of commitment to the organization. The correlation between commitment and supervisor evaluation had the highest positive value. Perceptions of the supervisor have an important impact on commitment. Employment in the fish processing sector provides women with some degree of economic autonomy, improved status and influence within their households. The seafood processing industry opens up new avenues to Sri Lankan women to redefine their position in fishing communities.

Introduction

Sri Lanka has significant pockets of fisheries activity although the sector makes only a small overall contribution to the economy. In Sri Lanka, a key issue in the fisheries sector is the role and status of the wives and other women in fishing families. There is evidence of positive developments from the women's perspective. Fish handling, grading and processing for local markets principally involve women and there is some evidence that they are becoming more active in these activities. Women's position in seafood processing in the developing world is remarkably similar to that of women in seafood processing in developed countries, albeit at a very different economic level (Macalister Elliot and Partners Ltd., 2002) Women's involvement in fisheries seem to be similar all the world over, in spite of the wide cultural, social, political and economic differences.

Time line of women's employment in fisheries in Sri Lanka

Earlier shore-based post-harvest fisheries activity provided certain opportunities for women. Their roles were traditionally important because they were the processors and handlers of fish for the domestic market, including commonly along the west and northwest coasts of Sri Lanka, although rarely along the south and southwest coasts. Especially in the southern parts of the island, women's involvement in any kind of fishing activity other than household work was rarely observed. Throughout Sri Lanka women's traditional roles in fishing families have been to support the male fishers, mainly through managing the shore side elements of the business and as economic partners to their spouses. Religious barriers also significantly affect female participation in fishing activities. Female participation in fishing activities is rare among Buddhist communities. For the Christian and Muslim communities within Sri Lanka, women's participation is high in fish handling, grading and marketing. The majority of the fishing communities located in the west (Moratuwa – Negambo) southwest (Payagala – Moratuwa) and northwest (Negambo – Puttlam) are Christians. Especially among these communities, women play important roles in fish grading, handling inshore and fish marketing in local markets. Traditionally they have a good reputation for home-made salted fish. Muslim communities are located in scattered areas around the coast, mainly in the north-west (Puttlam), south-west (Beruwala), south (Hambantota and Kirinda), and south-east (Ampara to Batticaloa). Shore based activities and local marketing are rarely carried out by women in Muslim communities. Their participation is important in home made dry, salted and smoked fish production along the south-east coast. In contrast, Buddhist women in fishing communities rarely participate in shore based activities, fish marketing and processing. Cultural barriers have strictly controlled the women's behavior and participation. Women are also highly affected by collapses in the industry but have very little role in resource management.

The emergence of shrimp processing during the late 1980s opened up new avenues for women as wage earners. However, women were expected to retain their domestic roles and duties, while the new jobs redefined their positions in the fishing communities and led to changes in the previous social balance. One of the forces behind the growth of the female workforce is the increasing presence of the Export Processing Zones and the subsequent promotion of the food processing industries. Women, especially younger, educated women, have been drawn into paid work for the first time. This work, however, is associated with low levels of job security, harassment at work and usually marginally paid production line work. Job security is affected by cost cutting at the expense of employees; given the fiercely competitive nature of the sector. The shutting down of processing leads inevitably to large-scale unemployment (Sharma, 2003). Often required to work at low plant temperatures and under poor working conditions, the women can also suffer long-term health problems. Very few women are decisionmakers or are active in trade union activities. Although very active in the productive sector of the seafood industry, women are still shouldering virtually all the domestic work in their homes (Swanrangsi, 2003).

Competitive advantage: the Sri Lankan way

Sri Lanka's seafood exports consist to a large degree of whole fresh, chilled and frozen products. The fishing industry contributed 3% to the gross national product (GNP) of the country (Central Bank of Sri Lanka, 2003). With the expansion of trade in fish and fishery products, there is a need for good quality infrastructure if Sri Lanka is to become internationally competitive in the fish export trade. The process of globalization has definitely led to an improvement in the export quality of the Sri Lankan fish and fishery export products. To be a market leader in seafood exports in the South Asian region, Sri Lanka has decided to follow strict quality assurance procedures under the European Union (EU) directives. With low-cost labor and relatively good access to resources, Sri Lanka enjoys a competitive edge (see Figure 1). An important achievement for Sri Lanka was to be named an EU list 1 country for seafood exports. Human resources and infrastructure are crucial factors which influence the success of quality assurance. For a firm and a country to experience a long-term sustained competitive advantage, they must invest in human resources and deploy scarce assets in the core areas that can most effectively provide the underpinning of a sustained competitive advantage (Central Bank of Sri Lanka, 2003). In Sri Lankan seafood processing firms, more than 90% of the plant workers are women. Providing better working conditions and understanding the workers' needs are crucial to achieving the target of a high quality product. Profitability of the seafood industry depends on keeping the cost of production low and a major part of this is the labor cost. To achieve better quality while enjoying good profit margins, the companies require better management to improve productivity and to minimize labor cost (see Figure 2).

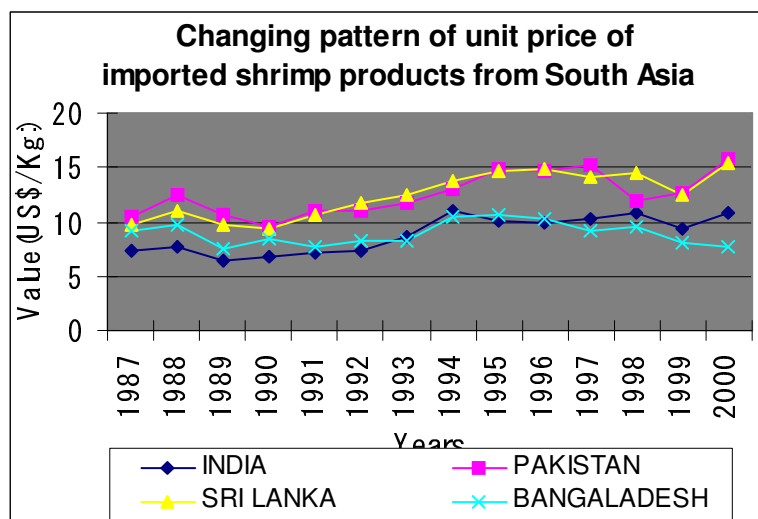


Figure 1. Analysis of competition for the South Asian shrimp exporters by unit prices in export market. (Source: Customs Bureau- Japan)

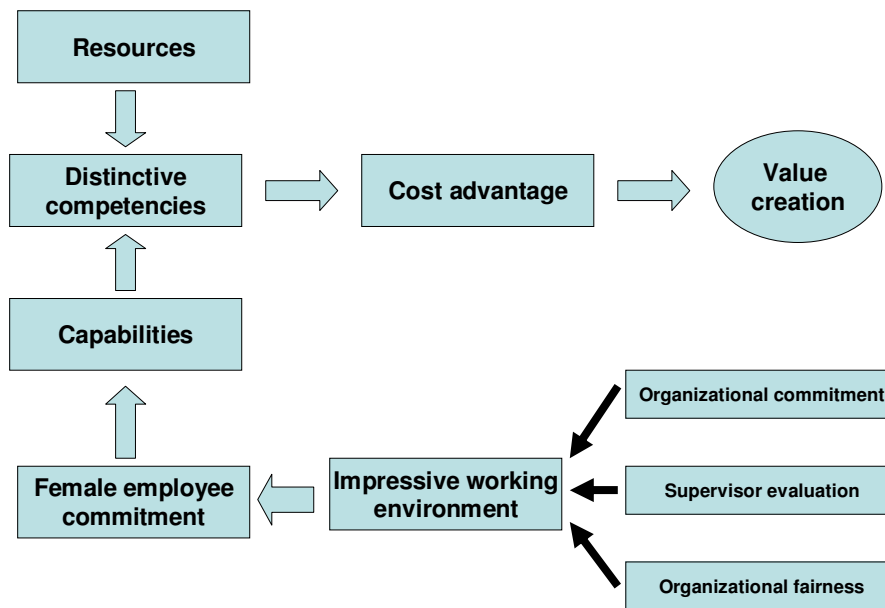


Figure2. Conceptualization of employee commitment to quality products

Women’s role in the seafood processing industry

The Central Bank of Sri Lanka (2003) recorded that the overall female participation in the labor force is 32.5% in Sri Lanka. In the traditional fishing sector, division of labor is replicated within the seafood processing industry. Traditionally women’s roles are not significant in fisheries. However, women play their main roles in post-harvest and processing activities. This gender segregation was taken as natural, and health and safety issues dominated the agenda of the government-based programs for women’s welfare. Some jobs have inherent gender connotations, i.e. some jobs require patience and diligence, which in Sri Lanka are seen as primarily female attributes, and led to women playing a major role in the seafood processing industry. However, this assumption also tends to label monotonous jobs as “female”, with the attendant disadvantage that these jobs have limited career potential and women are relegated to lower rankings in the plants. Although women regularly perform all the processing tasks on the shore in traditional fisheries, the range of tasks they perform in the frozen fish production plants are more limited. Men predominate in filleting, skinning and de-boning tasks in the tuna processing plants. The jobs where females are dominant are weighing, grading, packing and trimming. These are the lowest paid occupations in the plants. Supervisory and plant manager positions are held overwhelmingly by men (Table 1). Knowledge gained from on-the-job experience, high levels of education (the female literacy rate at 89% is the highest in the South Asian region), multiple skills and good judgment are critical assets of the Sri Lankan female workers (Central Bank of Sri Lanka 2003). Women workers in developing countries have limited opportunities to grow their critical assets as they tend to be concentrated in jobs which bring low earnings, are irregular and insecure and are beyond the effective reach of labor and social protection laws (Nishchith 2000).

Of the sample of 10 seafood companies, 1 woman chief executive officer and 6 women directors were found among the Sri Lankan fish processing enterprises. The only woman CEO was better educated than her male counterparts and most of the directors were the wives of top managers. But in the quality control sections female participation is equal compared with the other plant sections. Gender differences exist in wages and historically male workers had been paid more than their female counterparts. Gender discrimination is officially outlawed in Sri Lanka but discrimination against women still exists illegally. The average level to which women's earnings are discounted below those of men lies between 19-24% (Central Bank of Sri Lanka 2003). Average monthly wage for unskilled female workers is US\$47.95 (Central Bank of Sri Lanka 2003). Paid employment provides Sri Lankan women with some degree of economic autonomy, improved status and influence within their households.

Table 1. Ratio between men and women of different occupations in a processing plant

Occupation Group	No. of Female Employees	Male: Female
Laborers (prawn processing)	1535	2:10
Supervisors	45	10:2
Quality controllers	04	10:5
Administrators	21	10:5
Directors	06	10:2
CEOs	01	100:1

Source: Survey findings, March/April, 2004.

Objectives of the Study

This study was designed to explore the factors that affect the performance of female labor in the seafood processing industry. The impact of organizational fairness, organizational commitment and supervisor evaluation perceptions on worker commitment was the central theme. The discussions on the rapid change in the industry and emerging issues of women's roles in fish processing are based on a combination of literature reviews and interviews with individuals in the industry. The methodology follows that in previous study of Mowday et al. (1979); Cammann et al. (1983); Folger and Konovsky et al. (1987); Moorman (1991); Moorman et al (1993) and Schappe (1996).

Materials and Methods

Theoretical framework

Organizational science literature implies that the antecedents of organizational commitment can be influenced by management, and that the outcomes of commitment are favorable (Witt 1993). Researchers believe that committed workers contribute both motivation and creativity to the organization (Kimmel 1997). Aven et al. (1993) also suggested that committed employees contribute more to the organization in positive ways than less committed workers do. Organizational commitment is more

than passive loyalty to the organization (Kimmel 1997). It involves an active relationship with the organization such that individuals are willing to give something of themselves in order to contribute to the organization's well-being (Greenberg 1990). Further, the perception of fairness in work assignments can also play an important role in organizations. It is likely that this perception in how the assignment of current work is made is related to a desire to remain in the organization, whereas unfairness may contribute to a desire to leave. Witt (1993) examined the relationship between two reactions to work assignment satisfaction with initial work assignment and perceived fairness in current work assignment and organizational commitment. Results indicated that individuals reporting the highest levels of satisfaction with initial work assignment and fairness in the assignment of current work tasks expressed greater commitment to the organization. In general, a positive relation was found between organizational fairness perceptions and commitment (Kimmel 1997). More specifically, it is procedural justice that best predicts commitment.

The attempts to describe and explain the role of fairness in the workplace resulted in a growth of literature on the topic which was labeled "organizational justice" (Greenberg 1990). Theorists have distinguished between conceptualizations of justice that focus on content or outcomes and deal with the fairness of the ends achieved (Kimmel 1997) these are the distributive justice approaches and those that focus on the process, and deal with the fairness of the means used to achieve the ends these are the procedural justice approaches. Interactional justice is a third form of justice proposed by Bies and Moag (1986). They note that to large extent individuals make justice appraisals based on the interpersonal treatment they receive and interactional justice refers therefore to a social exchange between two participants (Cropanzano and Randall 1993).

Hypothesis testing

Fifty female workers were randomly selected from 10 seafood processing companies operating on the west and northwest coast of Sri Lanka. Primary data were collected from these 50 workers (see Table 2).

Table 2. Demographic analysis of the sample: Level of education

Level of Education	No. of Laborers
Primary education	04
G.C.E. ordinary level	18
G.C.E. advanced level	26
Degree/diploma	02

G.C.E. (General Certificate of Education)

Source: Survey findings, March/April, 2004

Compared with other developing countries, the gender disparity in formal education is not significant in Sri Lanka (Fontana et al. 1998). Educational attainment levels of both men and women have shown a persistent upward trend and the female literacy rate is only marginally lower than that for males in fishing communities. Female workers in the fish processing sector have better levels of formal education than those in other fisheries sectors. Female workers in fish processing plants are not only from fishing communities, but also from other agriculture and industry based communities.

Table 3. Demographic analysis of the women sampled: age distribution

Age Group (Years)	No. of Laborers
20 – 24	16
25 – 29	28
30 – 34	05
> 35	01

Source: Survey findings, March/April, 2004

Demographic statistics for the sample showed that the majority of the female workers belonged to the age group of 25-29 years (Table 3) and most have completed their secondary education. The majority of female workers are in their mid-20s . Younger and older female workers are not so common in the fish processing sector, the main reason being that the younger and older women cannot tolerate the long, shift-based working hours under the uncomfortable factory environment (e.g. the ambient temperature is $-4C^0$) and, if married, they have other duties that bind them to the family. For married workers, the job creates big burdens on them due to role conflicts as worker, wife and mother.

The impact of fairness in the workplace and supervisor evaluations on employee commitment was identified by testing the following hypotheses.

1. Organizational justice has a positive impact on organizational commitment. Specifically, the distributive justice factor will be the most predictive of affective commitment.
2. The supervisor's evaluation has a positive impact on organizational commitment. The degree of fairness of the supervisor will affect the commitment measures.

The survey questionnaire consisted of scales measuring justice, commitment and supervisor evaluation. The items on the survey were measured using the Likert 7-point response format, ranging from 1-strongly disagrees to 7-strongly agrees.

Evaluation of supervisor

This variable was conceptualized as the degree to which one supports or endorses a leader (Schaubroek et al. 1994). Cammann et al. (1983) used the Michigan organizational assessment questionnaire (MOAQ) for measuring the adaptation scale. MOAQ was used previously in procedural justice research to measure the evaluation of supervisors (Alexander and Ruderman 1987; Schaubroek et al. 1994). The scale asks respondents to mark the extent of their disagreement or agreement with six statements about their supervisor.

Organizational commitment

The organizational commitment questionnaire (OCQ) developed by Moorman (1991) was used. The OCQ is regarded as a measure of affective commitment as opposed to normative or continuance commitment. Respondents had to mark the degree to which they disagree or agree with nine statements about their feelings toward the organization.

Organizational fairness

The scale used by Moorman et al. (1993) and Price and Muller (1986) was applied to measure perceived organizational justice. The scale consists of three dimensions, distributive, procedural and interactional justice. Distributive justice was measured with items based on the distributive justice index developed by Schappe (1996). Five statements from the questionnaire were used to assess the fairness of different work outcomes, including pay level, work schedule, workload and job responsibilities. The scale is valid in discriminating scales of job satisfaction and organizational commitment (Moorman 1991). Procedural justice was measured with items designed to tap both formal procedures and interactional justice. Dimensions are consistent with recent multidimensional models of procedural justice (Moorman et al. 1993). Formal procedures (six statements) measured the degree to which job decisions included mechanisms that insured the gathering of accurate and unbiased information, employee voice and an appeals process. These statements originated from the rules of procedural justice developed by (Moorman et al. 1993) and (Folger and Konvosky 1989). Interactional justice was measured using nine statements that assessed the fairness of the interactions between manager and employee that enacted the formal procedures. The items measured the degree to which employees felt their needs were considered and adequate explanations were given for job decisions.

Results and discussion

In Sri Lanka, women are consistently paid less by about 10% compared to men in similar jobs. In the Sri Lankan context wage differences are due to the level of skill required or physical output required. In the sample of female workers surveyed, the majority worked hours of between 46 and 49 hrs. per week. Weekly salaries were somewhat more attractive than those for other jobs in the fisheries sector and the jobs were also convenient for women. The survey findings attempted to reveal the female workers' feelings about the top management, administration, company, and remuneration, workload, dedication to work for achieving product quality and relationship with the immediate superior.

The majority of the women plant workers "slightly agree" with their level of compensation, rewards and workload. But they "slightly disagree" with the company's top management's attitudes on administrative decisions. Decisions were perceived to lack transparency and workers feel they have minimum rights to raise their voices against the decisions. The majority felt happy about having their position in the company and to stay with the company. They "partly agree" that supervisors were helping them to perform well in their positions and to develop their skills, but women workers were "partly unhappy" about their involvement in decision making with top management. Most of the companies provide accommodation facilities within the company premises for the women workers. On the one hand, workers feel comfortable and tend to be devoted to their work, but on the other hand, the plants tended to have long working hours. Providing meals and other benefits for the workers during the long working hours were part of the compensation by the employer.

Means, standard deviations, minimum and maximum scores for the organizational justice scales, the commitment scale and the supervisor evaluation scale are presented in Table 4 below.

Table 4. Means, standard deviations and minimum and maximum scores for the organizational fairness scales, the organizational commitment, and supervisor evaluation scores

Measures	Mean Score	Standard Deviation	Minimum Score	Maximum Score
Distributive justice (pay scales, work levels, job responsibility, etc)	25.02	3.37	18.00	33.00
Procedural justice (employee voice, appeals processes, etc)	16.06	4.18	9.00	23.00
Interactional justice (manager and employee interaction fairness)	13.34	4.41	9.00	22.00
Commitment scale (feelings towards organization)	50.02	6.73	41.00	63.00
Supervisor evaluation scale (satisfaction with immediate supervisor)	24.04	2.73	19.00	30.00

Table 5. Bivariate correlation among organizational fairness scales, supervisor evaluation scale and commitment scores

	Distributive Justice	Procedural Justice	Interactional Justice	Commitment Scale	Supervisor evaluation Scale
Distributive justice	-----				
Procedural justice	-----	-----			
Interactional justice	-----	.655**	-----		
Commitment scale	.607**	.407**	-----	-----	
Supervisor evaluation scale	.608**	.509**	.626**	.670**	-----

** Correlation is significant at the 0.01 level (2-tailed).

Table 6. Multiple regression analysis for the effect of organizational fairness on commitment

Model	Un-standardized coefficients		Standardized coefficients	t	Significance
	B	Standard Error	Beta		
Constant	28.272	5.076	-	5.570	0.000
Organizational justice	0.399	0.092	.531*	4.341	0.000

p= 0.001

In Table 5, the majority of the correlations are positive and significant at p=0.001. There is a high positive relationship between organizational justice and commitment, $r = 0.608$ ($p = 0.001$). The correlation between commitment scale and supervisor evaluation scale is the highest, $r = 0.670$ ($p = 0.000$) and is positive. This is consistent with previous findings that indicate that distributive justice is the justice factor that is more relevant to organizational attitudes such as commitment. Although the relations found in this study replicate previous findings regarding these variables (Konovsky et al. 1987, Nishchith 2000; Sharma, 2003) the correlations found here between distributive justice and commitment are higher than in most previous studies. On the other hand, evaluations of supervisors were found to be highly correlated with commitment, $r = 0.670$ ($p = 0.000$). Specifically, the correlation among distributive justice, interactional justice and supervisor evaluation are much higher than the one with procedural justice, $r = 0.608$, $r = 0.626$ ($p = 0.000$) and $r = 0.509$ ($p = 0.000$), respectively. But findings highlighted that procedural justice and supervisor evaluation also have high positive correlations, similar to the levels in previous research (Mowday et al. 1979; Alexander and Ruderman 1987; Schaubroek et al. 1994).

A positive high correlation was found between supervisor evaluation and commitment, $r = 0.670$ ($p = 0.000$) which is much higher than found in other studies that looked at this connection where the correlation was in the ranges of 0.3 – 0.4 (Mowday et al., 1979); (Schaubroek et al., 1994). The correlation between supervisor evaluation and commitment is even higher than the correlation between commitment and procedural justice, suggesting that supervisor perceptions are an important variable to consider when looking at commitment in the seafood processing plants. The correlation between procedural justice and distributive justice is small, $r = 0.251$ ($p = 0.000$) and this indicates that the measures are not very similar.

Table 7: Model summary of the multiple regression analysis

Model	Change Statistics				
	R ² Change	F change	df1	df2	Sig. F Change
Organizational justice	0.282	18.842	1	48	0.000

a. Predictors: (constant), organizational justice

A multiple regression analysis was conducted to assess the predictive contribution of organizational justice (composed of procedural and distributive justice) to organizational commitment. Tables 6 and 7, presents the results of the regression

analysis. The results indicate that the effect of fairness is a significant predictor of commitment which accounts for 28.2% of the variance in organizational commitment (see Table 7 [$R^2 = 0.282$, $F = 18.84$, $p = 0.000$]).

One purpose of this study was to further examine the role of the supervisor perceptions in the context of the fairness-commitment relationship in organizations. Fairness issues have been recognized as very important to effective functioning of organizations, influencing various important organizational outcomes: such as trust in management, intention to stay or leave, evaluation of supervisor, conflict/harmony and job satisfaction (Alexander and Ruderman 1987), citizenship behaviors (Moorman 1993) and commitment (Folger and Konvosky 1989). Commitment is an important outcome leading to further favorable outcomes (Witt 1993) such as motivation, creativity and satisfaction. Considered with the fairness perceptions, the perceptions of the supervisor have important impacts on commitment. In the Sri Lankan seafood processing plant context, distribution justice has a direct impact on commitment. The supervisor evaluation plays an important role behind the interactional justice. The effects of the immediate leader remain an important issue for commitment. The findings show that distributive justice perceptions are the important predictors of commitment. The supervisor evaluations have moderating effects on the procedural justice-commitment relation. The greater commitment is a result of the higher supervisor evaluation and supervisor perceptions which play a key role in motivation. A positive high correlation which was much higher than in other studies (for example the study on nurses in southern USA in 1996 of Schappe) was found. This indicates that the supervisor evaluations are an important variable to consider in the commitment context.

Conclusions and Implications

In Sri Lanka, women's participation is rare in traditional fisheries activities (5% of the fisheries workforce) but importantly constitutes 63% of the fish processing workforce. Despite the resistance by cultural norms to their involvement, many women now work in the seafood processing plants that supply international markets. Growth of the export orientation for the seafood sector has benefited Sri Lankan women. The current and prospective labor demand for female workers in the fish processing industry has become important. However, in the Sri Lankan society, women's reproductive and domestic responsibilities are generally perceived to be their primary function. This perception reinforces structural barriers to women's mobility for productive work and limits their choice of income-earning activities. Increased manufactured exports are strongly associated with feminization of the industrial labor force. Sri Lanka belongs to the four countries which were named as the "East Asian Tigers" where the largest increases in both export orientation and the female intensity of manufacturing have occurred (Fontana et al. 1998). Women play significant roles in assuring the quality of the processed product – a critical factor in export competitiveness. In the Sri Lankan seafood processing industry, female workers enjoy somewhat better remuneration packages and work-related conditions (e.g. with factory-owned accommodation which are lacking in the other sectors, such as the garment manufacturing and agricultural processing sectors). A special feature of the seafood processing industry is that young single women are preferred as workers because they are more likely to be able to tolerate shift-based long working hours under uncomfortable plant environments.

Findings of the study also provide new insights into the importance of fairness and commitment in these organizations. Supervisor perceptions emerged as an important variable to consider in relation to organizational commitment. Employees placed importance on the quality of their interactions with their leaders, supervisors and the key representatives of the organizational justice processes. Expectations of the evaluations of the supervisor will act as a moderator in the procedural justice-commitment relation. The results replicate the previous findings of the study on fulltime and part-time employees in the United States of America carried out by Kimmel (1997). The present studies highlighted that justice perceptions are the important predictor of commitment, especially, distributive justice perceptions and confirmed hypothesis 1. On the other hand, it was found that evaluations of the supervisor have a moderating effect on the procedural justice-commitment relationship and confirmed the hypothesis 2. Findings also highlighted that the higher the supervisor is evaluated by the worker, the higher is the worker's commitment level. The supervisor perceptions were influential when procedural justice was low.

Organizational fairness issues have been recognized as very important to effective functioning of organizations. We found in this study that organizational fairness is also significant in the labor intensive seafood processing factories in Sri Lanka, influencing trust in management, intention to stay or leave, evaluations of supervisors, conflict/harmony and job satisfaction. Commitment improves the motivation, creativity, and satisfaction of workers. The perceptions of supervisors play an important role in influencing other organizational variables. The supervisor's roles as an immediate bosses of the grass-root level factory workers and as a company personnel in frequent contact with them must therefore be a key factor in maintaining the quality of the plants' output. The effects of the leaders remain as important influential factors. Superiors are highly influential in the organizations' treatment of workers regarding issues such as pay (increments), training, schedules, maternity leave, food arrangements and leave.

An important implication of this study is that organizations should identify the employee's level of commitment and especially recognize the committed employees and reward them according to their performances. This will lead to making a company a more comfortable place for its employees and ensure that their contributions towards productivity are high. Companies must pay attention to the way supervisory staff treat employees. It is important that leaders in the plants are perceived positively by the workers. Finally Sri Lankan female workers in the seafood processing industry play a significant role in assuring seafood quality while personally benefiting from the economic autonomy provide by their employment.

References:

- Alexander, S. and M. Ruderman. 1987. The role of procedural and distributive justice
In organizational behavior. Soc. Justice Res. 1(2): 177-198
- Aven, Jr.F.F., B. Parker, and G. M. McEvoy. 1993. Gender and attitudinal
Commitment to organizations: a meta-analysis. J. Bus. Res. 26, pp 63-73
- Bies R.S. and J. S. Moag. 1986. Interactional justice: communication of fairness p 43-
55 In R.J. Lewicki, B.H. Sheppard and M.H. Brazerman, Greenwich, CT: JAI
Press, Greenwich, Connecticut, USA.

- Cammann, C., M. Fichman, G. D. Jenkins and J. R. Klesh. 1983. Assessing the attitudes and perceptions of organizational members. p 71-138. In S. E. Seashore, E.E.Lawler, E.E., P. Mirvis, and C. Cammann, C. (eds.) *Assessing Organizational change*, John Wiley and sons, New-York, USA.
- Central Bank of Sri Lanka. 2003. Annual Report. Central Bank of Sri Lanka, Colombo, Sri Lanka. pp 97-155
- Cropanzano, R., and M. L. Randall. 1993. Injustice and work behavior: A historical review. p 147-163. In R. Cropanzano, (eds.) *Justice in the workplace : approaching fairness in human resource management*. Hillsdale, New-Jersey, Lawrence Erlbaum Associates, Hillsdale, New-Jersey, USA.
- Folger, R. and M. A.Konvosky. 1989. Effects of procedural and distributive justice on reactions to pay raise decisions. *Acad of Manage J* 32(1): 115- 130
- Fontana, M., S. Jokes and R. Masika. 1998. Global trade expansion and liberalization: gender issues and impacts. Institute of Development Studies, University of Sussex, Brighton, UK. pp22-50
- Greenberg, J. 1990. Organizational justice: yesterday, today and tomorrow. *J Manage* 16(2): 399-432
- Kimmel, M. 1997. Fairness and commitment in the workplace, the moderating effects of the supervisor, M.A. Thesis, San Francisco State University, California, USA. pp11-65
- Konovsky, M.A., R.Folger and R.Cropanzano. 1987. Relative effects of procedural and Distributive justice on employee attitudes. *Representative Research in Social Psychology*. 17(1): 15-25
- Macalister Elliot and Partners Ltd. 2002. The role of women in fisheries sector, p 9-25 Tender Fish/2000/01-LOT No.1, European Commission Directorate General for Fisheries, 56, High Street, Lymington, Hampshire, UK.
- Moorman, R.H. 1991 Relationship between organizational justice and organizational citizenship behaviors: do fairness perceptions influence employee citizenship? *J Aappl Psychol*. 76(6): 845-855
- Moorman, R.H., B. P. Niehoff and D.W. Organ. 1993. Treating employees fairly and organizational citizenship behavior: sorting the effects of job satisfaction. Organizational commitment, and procedural justice. *Employee Resp Rights J*. 6(3): 209-225
- Mowday, R.T., R. M. Steers and L.W. Porter. 1979. The measurement of Organizational commitment. *Journal of Vocational Behavior*, 14: 224-247
- Nishchith, V.D. 2000. Role and status of women employed in seafood processing units In India, No.112/1c, 7th Cross, J.P. Nagar, ii Phase, Bangalore-560078, India. pp127-135
- Price, J.L. and C.W. Muller. 1986. *Hand Book of Organizational measurement*, Pittman, Marshfield, Massachusetts, USA. pp 305-558
- Schappe, S.P. 1996. Bridging the gap between procedural justice knowledge and Positive employee attitudes. *Group and Organ Manage* 21(3): 337-364
- Schaubroek, J., D. R. May and F.W. Brown. 1994. Procedurals Justice explanations And employee reactions to economics hardship: a field experiment. *J Appl Psychol* 79(3): 455-460
- Sharma, C. 2003. The impact of fisheries development and globalization processes on Women of fishing communities in the Asian region, *Asia-Pac Res Network J* 8:1-12
- Swanrangsi, S. 2003. Technological changes and their implications for women in

fisheries, Fish Inspection and Quality Control Division, Department. of Fisheries, Bangkok, Thailand. pp 35-41.

Witt, L.A.1993. Reactions to work assignment as predictors of organizational commitment: the moderating effect of occupational identification. J Bus Res 26: 17-30