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Profile and Aspirations of Cavite ECOZONE Workers ¹

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ABSTRACT

One of the government's national development strategies is the establishment of world-class, environment-friendly economic zones (ECOZONE) all over the country to respond to demands for ready-to-occupy locations for foreign investments. The Special Economic Zone Act of 1995 backs this strategy. While an economic zone generates jobs, many of its workers are said to live in deplorable areas surrounding their place of work. The economic zone is host to various types of firms, including the electronic and garment establishments which employ mostly women workers. Cavite Economic Zone or CEPZ, which occupies 38 hectares, is the biggest among the four public ECOZONES in the country and hosts 268 operating firms.

The National Commission on the Role of Filipino Women (NCRFW) had initiated the advocacy for the improvement of the status of working women in ECOZONES through representations with selected legislators, National Anti-Poverty Commission, local government units and the Philippine Economic Zone Authority (PEZA). To support the claims of deplorable housing conditions of women in CEPZ, a survey was conducted in September 2003.

This paper looks at the strengths and limitations of the sampling frames that were considered in the process of designing the survey. It describes the socio-demographic profile of ECOZONE workers and their housing conditions. It also looks into the aspirations of ECOZONE workers with focus on women.

I. BACKGROUND

The right of women to decent shelter is highlighted in the Women in Nation Building Act (RA 7192), the law which embodies the country's affirmation to international agreement like the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), Nairobi Forward-looking Strategies for the Advancement of Women, and the Beijing Platform for Action. The Special Economic Zone Act of 1995 supports the government's national development strategies to establish world-class, environment-friendly economic zones

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(ECOZONE) all over the country. It is also in response to demands for ready-to-occupy locations for foreign investments. While an economic zone generates jobs, many of its workers are said to live in deplorable areas surrounding their place of work. The economic zone is host to various types of firms, including the electronic and garment establishments which employ mostly women workers.

In response to the advocacy for the improvement of the status of women working in economic zones, the National Commission on the Role of Filipino Women (NCRFW) convened selected legislators and representatives from the National Anti-Poverty Commission, local government units and the Philippine Economic Zone Authority (PEZA) in 2003. To concretize the programs to uplift the housing conditions of women workers in the ECOZONES, the group decided that the best way to assess the claims of deplorable housing conditions of women in economic zone was through a special survey. This paved the way for a Memorandum of Agreement (MOA) to be signed between NSO and NCRFW in June 2003 for the undertaking of the Special Survey on the Socio-Demographic and Living Conditions of Cavite Economic Zone (ECOZONE) Workers.

Cavite Economic Zone (CEZ), which occupies 38 hectares, is the biggest among the four public economic zones in the country. It is the host to 268 operating firms. This paper describes the sampling procedures in identifying the respondents. It also presents the socio-demographic and housing conditions gathered from the survey. Finally, it offers a glimpse of the aspirations of the ECOZONE workers.

II. SURVEY DESIGN

The sampling units considered were the 2000 census household information, list of barangays, and list of firms. Information based on the 2000 census provides a description of the economic and demographic characteristics of the persons in all geo-political areas of the country. It also collected information on the place of work but it was not possible to identify if an individual was working within the economic zone. Hence, to ensure that the respondents working in the ECOZONE were well represented, tracking the worker who was living in an adjacent province or region may have to be resorted. Another option was to use the list of barangays but this was outweighed with the large probability that workers in the economic zone were not resident of the adjacent areas, hence, would require more extensive field work.

The list of establishments in the Cavite Economic Zone is available from the Philippine Economic Zone Authority. As this also provides the number of workers by sex, the use of this frame was adopted.

Based on the list of establishments, two strata were created: garment and electronics. These two industries were identified as employing mostly women. A sample size of 2,730 workers was computed using the proportion of women with housing facilities, assumed to be 50 percent or $p=0.5$. Each stratum was further stratified to small, medium and large based on the number of employees, as follows:

Small	Less than 100 employees
Medium	100 to 199 employees
Large	200 and over employees

There were 102 firms in the Cavity ECOZONE Area, with 63 firms in electronics and 39 firms in the garment industry, or a share to the total firms of 62 percent and 38 percent, respectively. Moreover, electronic firms employed a total of 22,776 workers, while there were 16,981 workers for garments, or a share of 57 percent and 43 percent, respectively. Using these percentages, the number of firms per stratum was determined. To facilitate computation, the percentage was rounded off to 60 percent for electronics and 40 percent for garments. Based on these numbers, the size of the firms and cost consideration as well as the number of firms per size and stratum were computed and shown below.

Stratum and Size	Total number of firms	% of firms	No. of sample firms	No. of personnel (take all)
STRATUM E				
Small	24	25	6	265
Medium	9	25	2	246
Large	30	20	3	1154
SUB- TOTAL	63	60	11	1665
(with 10% non-response rate)				1498.5
STRATUM G				
Small/Medium	10	30	3	225
Large	29	10	3	1298
SUB- TOTAL	39	40	6	1523
(with 10% non-response rate)				1370.7
TOTAL (with 10% non-response rate)	102	-	17	2869

Hence, a sample of 17 firms out of the 102 firms or about 17 percent samples were approached for the survey. Once the firm is selected, all the employees will be enumerated. There will be no selection of employees within the firm to facilitate the interview process and also to eliminate bias in selection.

Self-administered questionnaire, that is, the respondent will fill-out the questionnaire personally, was designed. The questionnaire, originally developed in English, was translated to Filipino. Using the self-administered questionnaire approach, NSO Cavite office coordinated with the Human Resource Manager of the sampled firms to distribute the questionnaires to its workers. Several changes were made in the list of sample establishments due to the following:

- a. Owner/manager did not allow the conduct of the survey
- b. Shutdown in the operations of the establishment as the survey was done in an off-peak season
- c. The establishment could not be located.

All sample establishments did not allow the interview of the workers by the NSO field staff as this may delay their work and consume a lot of time. Assurance from the Human Resource Manager to get the completed questionnaire was solicited through constant visits by the NSO staff.

Data collection started on September 15, 2003 and lasted until mid-November.

The difference in the characteristics of the two industries contributed to the delay in the data collection. The electronics industry was in its peak season; hence most of the establishments were asking their workers to render overtime services. This was given as the major excuse in the slow retrieval of questionnaires. On the other hand, the garment industry, especially those engaged in knitting, was temporarily shut down. A substitution in the sample entailed a new cycle of establishing contact, explaining the objectives of the activity and securing permission to distribute the questionnaires to the workers.

The returned questionnaires reached more than 2,500 respondents. Since some of the questionnaires were not completely answered, personal interview of the respondents were attempted. In some cases, questionnaires with many blank responses were returned to the respondents for more answers. The NSO Cavite Staff initially processed the completed questionnaires. To prepare the questionnaires for machine data processing, the responses were translated into codes. Standard geographic, demographic (i.e. sex, marital status, education, etc) and economic (i.e. occupation) codes were utilized. Since the standard occupation codes did not discriminate among the occupations reported, a special set of coding scheme was prepared. The same was done for the entries for aspirations, which did not have any adopted standard coding.

III. LIMITATIONS OF THE SURVEY RESULTS

The Special Survey on the Socio-Demographic and Living Conditions of Cavite Economic Zone (ECOZONE) Workers is an exploratory study aimed at providing baseline data. As there was no sampling employed within the sample establishments, bias in the selection of respondents was removed. While exploratory in nature, the results of the special survey could be utilized in advocacy work as well as microanalysis of the industry sectors covered.

The survey results, however, should be used with caution as it is limited to electronic and garment workers. Responses gathered were not validated. For example, there were no actual visits to the housing units of workers or a crosschecking of employment record in the completed questionnaires against the company records. Validation of the responses was made only for basic demographic characteristics like age and sex using the entries in the questionnaire. Responses entered in the questionnaires were taken at its face value, especially in the aspirations portion.

IV. PROFILE OF WORKERS

A total of 2,767 Cavite Economic Zone (ECOZONE) workers were interviewed: 1,505 or 54.4 percent from electronics firms and 1,262 or 45.6 percent from garments industry. (Table 1)

Socio-demographic characteristics

As expected, females outnumbered the males at a ratio of 37 males per 100 females. This indicates that the Cavite ECOZONE electronic and garment industries are predominantly women populated. If electronics or garments industry were taken separately, females would still overshadow the number of male workers. However, the sex ratio of workers in electronics industry was higher (45.7 males per 100 females) compared to that of the garments industry (28.1 males per 100 females).

More than 60 percent of the workers were in their twenties. Those aged 21 to 25 years accounted for 34.1 percent while those aged 26 to 30 years, 29.1 percent. Segregated by sex and by industry, the age group 21 to 25 years was still the modal class. Likewise, the discrepancy in the number of males and females was largest for the age group 21 to 25 years where females outnumbered males by 370. There were 12 workers considered as child labor being in the age group 15 to 17 years. There was only one worker in the garments industry in the age group 56 to 60 years while 12 workers in the electronics that were in the age group 51 to 55 years. (Table 1)

About 1,521 or 55 percent of the Cavite ECOZONE workers finished high school, 14.9 percent completed college level and higher, and 12.8 percent were college undergraduates. Industry-wise, there were more high school graduates (784) in garments than in electronics (737). However, the number of workers who reached college and higher was more in electronics compared to their counterparts in garments industry. Most of the jobs in the Cavite ECOZONE do not require high educational attainment. (Table 2)

Single workers accounted for 49.7 percent of the Cavite ECOZONE workers while married persons reached 40.8 percent. By sex, married males dominated among the male workers (53.3%) while single females were more common among the female workers. A look at the industries reveals that the electronics industry is more attractive to single women (65% single females to total females). There was no marital status preference among females employed in the garments industry. (Table 3)

Having infant and preschool children restrains many women from seeking work. The survey provides information on the extent of childrearing responsibilities of the workers by asking how many children six years and below is living with the worker. About one in every three workers reported that they have children six years old and below with 27.2 percent reporting that their children six years old and below live with them. Among males workers, 36.2 percent reported to have children six years old and below living with them while for females, 23.8 percent. (Table 4)

The proportion of workers with their children living with them was greater for those in the garments industry (35%) than in the electronics industry (29.8%). Among female workers, the same observation holds (31.0 percent for garments and 24.7 percent for electronics).

Of the 1,912 permanent workers in Cavite Economic Zone, 614 (32.1%) received monthly gross earnings ranging from P6,001 to 7,000. The modal monthly gross earnings of the workers is P6,500.50 while the median gross monthly earnings is P6,136.65. The average monthly gross earnings is P5,944. (Table 5)

The proportion of the contractual workers in the electronic industry (51.9%) and garment industry (51.5%) was almost the same. They received a 15-day net pay of P2,001 to P3,000.

Of the 856 contractual workers, 396 or 46.3 percent reported that their working contract with the firm would last for five months while one fourth (25.1%) had contracts good for four months. Those who had a contract for six months or more accounted for 17 percent while those with three months or less, 7.2 percent. (Table 6)

Housing Conditions and Facilities

From among the 2,767 workers surveyed, about 55.5 percent lived in single or duplex housing units. This means that there were 1,537 of them (419 male workers and 1,118 female workers) living in this kind of housing unit. From among the workers in electronics industry, about 53 percent stayed in single or duplex houses compared to 58.6 percent among garments industry workers. (Table 7)

There were 473 workers or 17.1 percent who lived in apartments. The percentage was higher among workers in the electronics industry at 19.8 percent than those among garments industry workers at 13.8 percent.

Those renting rooms in boarding houses comprised 18.1 percent of the total workers included in the survey. Seven percent of the workers in electronics and garments industries were bed spacers. The percentage of bed spacers was higher among female workers (8.4% or 169 workers) than among their male counterparts (3.5% or 26 workers). The same trend could be found among workers in electronics industry and among those in the garments industry.

About nine out of 10 ECOZONE workers surveyed reported to have aluminum or galvanized iron as roofing materials for their houses. The rest made use of a mixture of strong and light materials or plainly light materials. (Table 8)

Out of the 2,767 ECOZONE workers surveyed, there were 136 workers (4.9%) who reported as living in rooms/housing units without windows, 59 of which work in the electronics industry and 77 in garments firms. Of the 136 workers who reported having no windows in their housing units, majority (76.5 percent or 104 workers) are female workers, that was, 63 from the garments sector and 41 from the electronics sector. (Table 9)

Of the 2,767 workers, only 17 workers or less than one percent reported to have less than three square meters of bedroom. Of these, eight out of 10 were females (two males and 15 females). On the other hand, majority or 63.64 percent occupied bigger-sized bedrooms with an area of 12 square meters or more. About three out of 10 (32.9%) occupied bedrooms with an area of three to less than 12 square meters. (Table 10)

The top three household conveniences include electric fan, television set and radio/stereo/CD, respectively. Nine out of 10 ECOZONE workers used electric fan. About 86.4 percent of the workers used television sets while 76.3 percent used radio/stereo/CD. (Table 11)

The same ranking was reported among male and female workers both in the electronics and garments industries.

More than half (55.7%) of the workers reported presence of telephone/cellphone. Among women workers, usage was at 56.3 percent while among male workers, the percentage was at 54.1 percent. The percentage is higher among workers in the electronics sector at 66 percent compared to only 43.4 percent among workers in the garments sector.

V. OCCUPATION ASPIRED

Workers in the Cavite ECOZONE garments and electronics industries were asked what type of occupation they desire within the country. The responses were grouped according to the major standard occupation groups. However, the results must be interpreted with caution, as only 30 percent of the workers answered this question. (Table 12)

About one in every eight (12.9%) workers in both the electronics and garments industries aspired to be in the professional occupations within the country. Within this occupation group, being a professional nurse or a general elementary education teacher were the most common aspirations for professional occupations desired within the country. Less than five percent of the ECOZONE workers reported to aspire for managerial occupations, which include being in government (3.8%). The same was true for clerical occupations (3.4%).

About 15 percent of female workers aspired to be in a professional occupation within the country. The next common occupation groups aspired were clerical occupations (4.2%) and managerial occupations, which include being in government (3.0%). On the other hand, a smaller proportion of male workers aspired to be in professional occupations (7.5%) compared to their female counterparts. A large proportion of male workers aspired to be in the managerial occupations, which include being in government (7.5%) compared to their female counterparts. (Table 12)

One out of five women ECOZONE workers in the electronics industry aspired to be work in either professional (16.8%) or managerial (4.0%)

occupations. In the garments industry, professional (12.9%) and trade (5.9%) were the most common occupations aspired for in the country. In both industries, professional nurse occupation was the most popular aspiration

Workers in the Cavite ECOZONE garments and electronics industries were also asked what type of occupation they desire outside the country. The responses were grouped according to the major standard occupation groups. However, the results must be interpreted with caution, as only 35 percent of the workers answered this question. (Table 13)

Like in the occupation desired within the country, about one in every eight (11.2%) workers aspired to be in the professional occupations outside the country. The same pattern was true for both electronics and garments industries. Within this occupation group, being a professional nurse (4.0%) was again the most common aspiration for professional occupations desired outside the country.

Less than five percent of the ECOZONE workers aspired for managerial occupations outside the country, which includes being in government (3.8%). The same was true for clerical occupations (3.4%).

Workers in the Cavite ECOZONE garments and electronics industries were also asked what type of housing unit they desire. More than eight out of 10 identified having a single house. The same pattern was true for both electronics and garment industries. (Table 14)

Only one out of 20 workers answered that they aspired to have a condominium or tenement housing. It must be noted that it has been a Filipino practice to live in single houses.

More than three fourths of the male and female workers desired the presence of a health facility within the barangay. Drugstore, convenience store and day care facilities were identified by the majority as desirable within the barangay. Women workers were less desirous of sports facilities like basketball/volleyball court, swimming pool and gymnasium. The above trends were true for both electronics and garment industries. (Table 15)

VI. CONCLUDING NOTES

The special survey supported the declaration that ECOZONE workers are predominantly female. Women workers outnumbered the males in electronic and garments industries in the Cavite ECOZONE. Women workers were usually in their twenties, with high school education and single. About one third of the married women had children 6 years old and below living with them. Permanent workers in the ECOZONE, whether female or male, received an average monthly gross earning of about P6,000. Contractual workers' contract was from four to five months with a 15-day net pay of P2,001 to P3,000.

A look at the housing conditions revealed that ECOZONE workers had relatively good housing units with strong materials for roof, good ventilation and a minimum of 12 square meter bedroom. Electric fans, television and radio/stereo/CD were standard gadgets in the household. The majority used cell phones. While the reported housing conditions did not seem to be wanting, further analysis may be made by comparing with census or administrative data in the ECOZONE location and the adjacent municipalities to validate the findings.

The dream of being a professional still hounds each and every Filipino. Women workers aspired to have a professional occupation either within or outside the country while male preferred to have a managerial occupation. Being a teacher was a common dream but with the lure for higher paying jobs outside the country, being a nurse had become the goal of many of the ECOZONE workers.

As to living facilities, having a single house located in an area with accessible health, daycare and market facilities was the common aspirations of the ECOZONE workers.

Current design of NSO's industry censuses and surveys provide only for the interview of the establishment's management. Workers' status and perceptions are usually asked in household-based interviews. However, household surveys do not provide statistics by ECOZONE or the industries it caters to. The collection of data from workers at the workplace is a new approach. Similar approach may be pursued to get the view of those who have the same type of work and workplace. The NSO field staff, with its network and survey experience, can mount such activity with appropriate resources.

One of the strengths of the Survey on the Socio-demographic Characteristics and Living Conditions of Workers in the Cavite ECOZONE is its use of a two-stage stratified survey design. The design utilized can be replicated if there is a desire to apply it in the conduct of a survey in other economic zones.

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