



## **RURAL INDUSTRIALIZATION AND THE DE-FEMINIZATION OF RICE FARMING, THE CASE OF A VILLAGE OUTSIDE THE FREEPORT AREA OF BATAAN**

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**ABSTRACT** – This paper examines the effects of rural industrialization on women’s access to rice farming in the Philippines by studying one village in the town of Mariveles in the Province of Bataan where the first Special Economic Zone was established in the country in 1972. Findings from household surveys and field interviews conducted from February to August 2015 illustrated that the creation of the zone provided economic opportunities for rural folks especially among women. However, the resulting labor scarcity initiated changes in farming practices, which in turn, created barriers for women to participate in rice farming, de-feminizing it in the process. This is especially significant among older women who are unable to work anymore in the factories. The findings in this study present a different dynamics from the previous researches on women’s participation in the manufacturing sector and the agriculture sector as it tries to determine how rural industrialization affects women’s participation in rice farming.

Key words: De-feminization in Agriculture; Rural Industrialization, Special Economic Zones, Rural-Labor Markets

### **Introduction**

Women’s role in agriculture continues to be vital as women contribute almost half of the labor in rice farming in Asia (Agarwal, 2011). In the Philippines, it is estimated that up to 49 percent of farming households hire women as laborers (FAO, 2005). Wider access to work and employment among rural women is widely believed to enable increases in household income and can be an effective tool to achieve rural development. This is important in a country like the Philippines where a significant part of the population resides in the rural areas.

Because poverty in the Philippines has remained largely a rural phenomenon, the government has set its sights in creating employment in the rural regions of the country through the promotion of the Special Economic Zones (SEZs) to foster rural development. SEZs are broadly defined as demarcated demographic areas where the

rules of business are different from the rest of the national territory and are principally geared to provide better investment conditions, trade and customs, taxation, and regulatory environment (Farole and Akinci, 2001). Such industrial enclaves have been proven to generate high employment and foster development in developing countries (Wong and Chu, 1984). Furthermore, studies have noted that SEZs in the Philippines generally create opportunities for the young female workforce (Warr, 1984; Chant and McIlwaine, 1995; Kelly, 2000). Currently, there are 68 operating manufacturing zones in Philippines while 28 more are in the process of development.

In 1972, the Philippine government established the first SEZ in the Philippines in the rural town of Mariveles as a showcase for other planned SEZs in the country. It was successful in attracting foreign manufacturing companies in the town, thus generating employment opportunities for the local rural folks, especially among women (Castro, 1982). Rural industrialization and the creation of industrial estates, however, have also been found to have negative effects on rural women in the Philippines as it can cause the loss of traditional jobs of women in farming, which in turn, might cause problems in attaining quality livelihood in the long run (United Nations, 2008). Furthermore, there have been few studies on the bigger picture of rural women's role on the labor market and how it is being changed by development (Horton, 1996). Thus, there is a need to further study the effects of rural industrialization in the access of women to traditional rural livelihood.

The objective of this study is to conduct an inquiry of the effects of rural industrialization on the access of women on rice farming labor markets. Specifically, this study will try to illustrate how rural industrialization, via the creation of SEZs, affects women's participation in rice production and also illustrate how it changes the way women access farm labor for livelihood.

### **Literature Review**

Women in the Philippines are traditionally involved in a variety of tasks in rice farming such as transplanting, manual weeding, and crop care (FAO, 2005; Quisumbing, 1994). Agarwal (2011) estimated that major rice producing regions in Asia are moving towards a feminization of agriculture wherein there are growing proportions of women working in agriculture as men find jobs in the non-farm sector. However, other scholars have documented instances in Southeast Asia where a 'de-feminization' of agriculture or the reduction of participation of women in agricultural tasks is occurring due to farm mechanization, the diversification of livelihoods, and proliferation of non-farm employment in the rural areas. In the Philippines, Fegan (1989) observed that the introduction of farm machineries such as the winnowing machine and the threshing machine have rendered much of the rice farming tasks away from women. A study by Parnwell and Arghiros (1996) in Thailand confirms the trend of substitution of women labor by machines. Studies by Estudillo et al. (2016) and Quisumbing (1994) have also illustrated that the unequal transfer of land due to traditional roles between men and women have also greatly contributed to the diminishing access of women to farming. This has also prompted Fegan (1989) to believe that landless women have now become irrelevant in the production of rice in the Philippines.

Non-farm employment is seen as a saving grace for women who have been marginalized by mechanization and the unequal access to land. Estudillo (2016) argued that compared to men, there is a stronger incentive for women to work in the non-farm sector as it provides more equal opportunities. Saith (1991) suggests that rural industrialization was

seen by policy makers as the key to provide employment among landless agricultural workers. Various studies have documented the advantages that export-oriented manufacturing has brought to women especially in rural areas. Warr (1984) and Rigg (1997) have documented that majority of the employment among SEZs are from young women without previous working experiences. Learning from the case of the Mactan Export Processing zone in the province of Cebu in the Philippines, Chant and McIlwaine (1995) observed that women tend to be in a better position to be employed in the SEZs than males. Women are more in demand in garments and electronics assembly because they are perceived to have "nimble fingers" (Pearson, 1998; Chant and McIlwaine, 1995). Furthermore, according to Wolf (1992) factory employment gives rural women both economic and psychological and social benefits.

On the other hand, some studies cite exploitation in the SEZs. According to Ofreneo (1995), women employed in the SEZs have been generally receiving low paying and menial jobs. Also, Price (1983) warns of treating the effect of industrialization as an all-encompassing positive effect among women. Furthermore, studies by Rigg (1997) and Wolf (1992) documented that most working-women who have children and women with low education tend to lose out in the competitive job markets in the manufacturing industries.

Many studies have highlighted the positive and negative experiences of women in agriculture and also the experiences of women in manufacturing and industry. However, researches have remained thin in explaining how rural industrialization influences the roles and access of women to farming.

## **Methodology**

The Freeport Area of Bataan (FAB) and the town of Mariveles were chosen as the research sites for this study because they provide a setting where an SEZ is surrounded by agricultural areas, specifically rice areas. Also, it presents a setting where the SEZ is the only investment and growth driver in the area. The village of Town Site was chosen as it is the largest rice-farming village in the town.

This study utilized a mixed-method approach by employing qualitative and quantitative methods of data collection and analysis. Household surveys and interviews were conducted from February to August 2015. One hundred households were randomly selected from the total of 1,386 non-farming households in the village. On the other hand, all 44 farming households in the village were interviewed and surveyed. Structured questionnaires were utilized to acquire socio-economic information and employment information among household members. Household heads and spouses were also asked to recall the occupation of their parents in 1970. Farming household heads were asked regarding their past and present farming practices.

Key informant interviews were also conducted among farmers, farmer leaders, farm laborers, labor leaders, residents of the village, and former and current SEZ factory workers. Thematic analysis was used to analyze results from the interviews. Data from the interviews were used to validate the data from the survey. The construction of the survey questionnaires was consulted with the farmer leaders, municipal government officers and village officials to enhance appropriateness and validity. Results of the

surveys and interviews were also presented to key informants for validation.

Descriptive statistics from the household survey was used to present the past and current occupational structure of the village. The data from the interviews were used to illustrate the experiences of the villagers to explain the changes in women participation in rice farming that can be attributed to the establishment of the SEZ in the town.

## Results and Discussions

The village of Town Site is located about 20 kilometers east of the present day SEZ. Livelihood in the village and the town of Mariveles before the 1970s consist mainly of agriculture and fisheries. This changed with the opening of the SEZ in 1972. Earlier known as the Bataan Export Processing Zone, the Freeport Area of Bataan was a showcase by the Philippine government to attract future manufacturing firms in the country (Remedio, 1996; Warr, 1989). The SEZ was successful in attracting local and foreign companies in the town. As seen in Table 1, the number of firms grew from 16 in 1975 to 56 by 1980 and generating a direct employment of 20,949.

**Table 1. Number of Workers Employed and Number of Firms in selected years**

Year	Number of Workers Employed	Number of Firms
1975	14,908	16
1980	20,949	56
1985	15,433	36
1995	19,426	61
2005	18,429	55
2013	17,490	68

Source: Unpublished Data, Authority of the Freeport Area of Bataan

Because most of the firms which were located in the SEZ were composed of garments and textiles, it created a high demand for sewers. According to the household interviews, sewing was seen as a woman's job back then as few men had the skill in sewing or were willing to work as sewers. Women in the village took advantage of this and flocked to the factories. They were hired to make bags, clothes, dresses, etc. Electronic manufacturing firms also setup shops in the zone and added to the demand for women labor. Electronic firms preferred women in the assembly lines for their "nimble fingers" (Pearson, 1998).

The opening of garments, textiles, and electronics factories in the zone provided opportunities for women, especially the young and single, to have a source of income in the formal sector. Further, it was also seen as a more prestigious form of employment among the villagers compared to farming.

The labor demand back then is described in the study of Castro (1982) and in the study of Warr (1984) as employment that requires low skill and low education. Furthermore, Castro (1982) highlighted that some firms even prefer inexperienced and unskilled laborers in order for them to pay the workers lower wages. At that time, there were no strict age requirements or educational requirements to be employed in the zone. Firms also offer in-house trainings for novice workers in sewing, soldering, welding, and other skills. In an interview with one former factory worker in the zone during the 1970s, the zone was described as "a happy place to be in." According to the former factory worker, he described the zone as such because "work is easy to come by as long as people search for it."

Table 2 compares the composition of firms in the early days of the zone to today. In recent years, the SEZ is diversifying into light metal manufacturing and plastic products manufacturing. Also, the zone is becoming a more popular location for shipyards. However, much similar in its early days, labor-intensive garments and wearing apparel manufacturers still dominate the firms in the FAB today.

**Table 2. Companies inside the zone according to products produced**

	1977	2013
Garments/ Wearing apparel	13	16
Handicraft	2	2
Electronics	2	3
Light metal products	1	11
Plastic Products	2	8
Leather Products	4	0
Light Mechanical Products	1	0
Automotive	1	1
Woodcraft	1	0
Textile Mills	2	3
Machinery	1	2
Shipyard	1	7
Chemical	0	2
Others	0	13
Total	31	68

Sources: 1977 figures are from Wong and Tiongson (1980)

2013 figures are from the unpublished data of Authority of the Freeport Area of Bataan

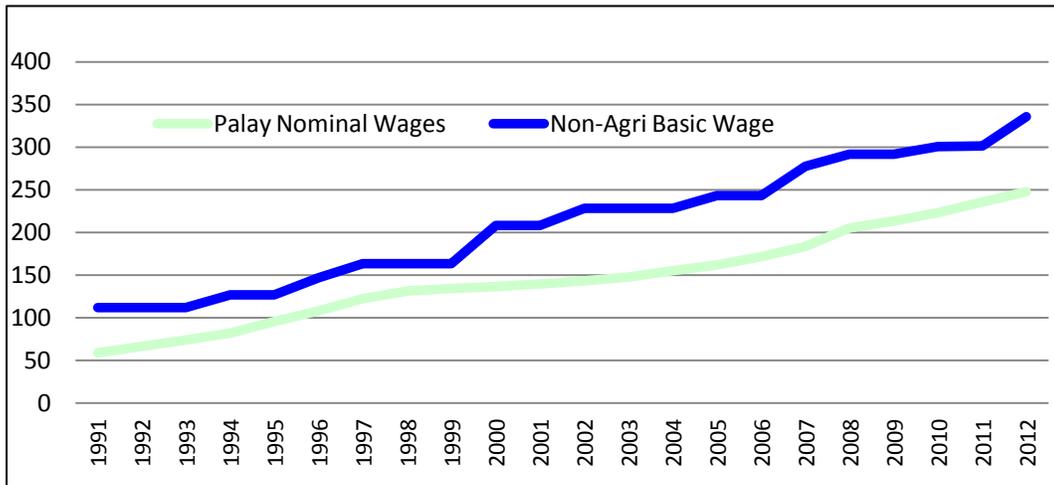
the village expressed that they have been observing a steady increase in the number of men working as sewers recently. Despite this, women from the village mostly find more employment in the zone than men. Women find work in garments and wearing apparel companies and in the production lines of companies manufacturing light metals, plastics, and electronics. However, unlike in 1970s and the 1980s, companies have enacted cost saving labor policies to make them more competitive globally. Policies on contractualization, education requirement, skills requirements, and minimum wages have greatly affected the dynamics of women employment in the SEZ and in the village.

Current firms in the FAB require factory workers to be at least highschool graduates. According to one official from one company, "this is a way for firms to have a better quality of applicants". In addition, as compared to the early days of the SEZ, companies of today do not provide in-house trainings for unskilled and inexperienced applicants anymore. Furthermore, garments and textile companies require accreditation from the government agency Technical Education and Skills Development Authority (TESDA) in hiring sewers. As a result, applicants have to undergo trainings in TESDA training centers to acquire accreditation. Applicants can pay the training fee gradually when they get hired in the factories. This, however, requires additional investments on the part of the applicants as trainings can last until six months. Respondents expressed that they have to invest on transportation costs and their daily allowances. The common practice is that girls and boys after graduating high-school enroll in a training center for six months then apply to the factories when they turn 18 years old. The same is also true for welders and metal craft workers. Firms also usually do not accept applicants over 35 years old.

Residents of the village expressed that keeping the job is also not as easy as it was before when contracts are longer and companies give successive contracts and regular positions to their workers. The Philippine labor code, amended in 1989, states that a worker who has been an employee of the same company for at least six months is entitled to health benefits, vacation leaves, and other bonuses among others. Although the law means well, a loophole is exploited by the companies by deliberately giving five-month contracts to avoid paying enormous amounts of benefits and regularizing their huge work forces. As a result, workers are forced to find another job in other factories when their contracts end. If they can find work in another firm, they have to wait for 5 months in order to get hired in the same company again. This presents challenges in securing a long-term career and for long term planning among the workers. Furthermore, as more and more young people become eligible to work, respondents indicate that it has become increasingly difficult to find jobs in the factories unlike before. Despite this, factory work still remains as the preferred choice among the working population in the village according to the interviews.

As seen in Figure 1, non-agriculture basic wage is significantly higher than the wage in rice farming. The PhP 350 SEZ daily wage is also higher than the national daily income threshold of PhP 250 for a family of 5 to survive set by the national government.

**Figure 1. Palay (Rice) and Non-Agriculture Nominal Wage in Region III, 1991-2012**

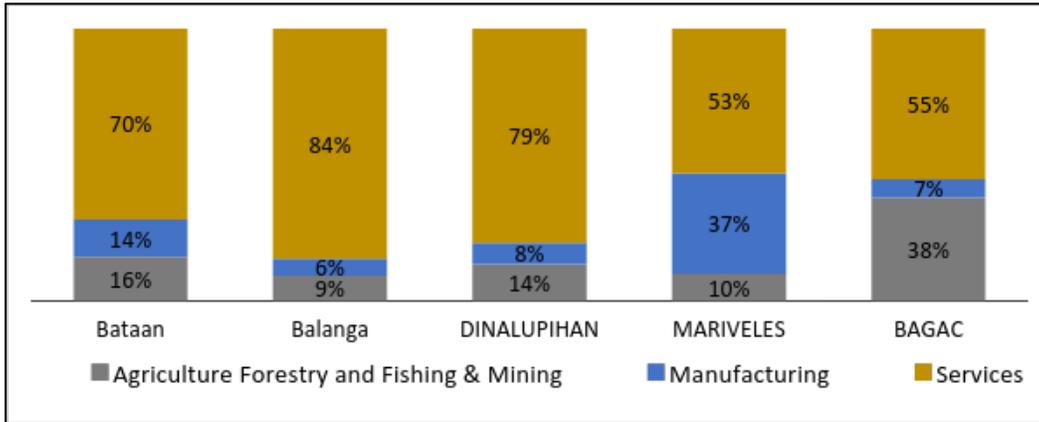


Source: Philippine Statistical Authority

For married couples, additional income of women from working in the factories can be a good boost in the household income. However, it is only beneficial until the woman gets pregnant and gives birth. Only earning the minimum wage and because of the contractual nature of employment in the zone, mothers cannot afford to hire household help to take care of children while they work.

The proliferation of the factories in the SEZ resulted in the diversification of employment opportunities among the village households. Today, the town of Mariveles has the highest employment in manufacturing sector in the province. As seen in Figure 2, manufacturing employs 37% of the labor force in the town. This is better than bigger cities of Balanga and Dinalupihan in the province of Bataan. This is also twice the employment rate in manufacturing of the province. When compared to the nearby town of Bagac, which do not have manufacturing factories, a stark difference can be seen between a town with an SEZ and a town without.

**Figure 2. 2010 Employment in selected towns in Bataan Province by major economic sector**



Source: Philippine Statistical Authority

Current non-farming household heads in the village and their spouses were asked to recall the occupation of their parents in the year 1970 when the zone is yet to be established in the town. The results were compared to the occupations of the current men and women in non-farming households 18 years old and older. Results from the household surveys in Table 3 shows that compared to their parents, current men and women respondents 18 years old and above have occupations that have diversified from farming and fishing. Most non-farming households today have ancestors who are engaged primarily in farming, fishing or farm labor in 1970. This data illustrates that there is a significant shift to industrial employment among the villagers. Today, there are only 44 farming households out of current 1,430 households in the village. All farming household heads reported that they descended from farming families.

**Table 3. Occupations in Town Site Village 1970 and 2015**

Occupation	Town Site							
	Fathers of Current non-farming Household heads and spouses in 1970	%	Mother of Current non-farming Household heads and spouses in 1970	%	Men in current non-farming households 18 years old and above 2015	%	Women in current non-farming households 18 years old and above 2015	%
Rice Farming	19	32%	7	10%	0	0%	0	0%
Farming Other Crops	1	2%	4	6%	0	0%	1	1%
Farm Laborer	6	10%	4	6%	17	10%	1	1%
Fishing	12	20%	1	1%	34	21%	1	1%
FAB-Factory worker	0	0%	0	0%	30	19%	47	35%

Construction	1	2%		0%	11	7%	0	0%
Vendor	4	7%	5	7%	6	4%	12	9%
Overseas Work	1	2%	1	1%	10	6%	3	2%
Housewife	4	7%	38	57%	0	0%	24	18%
Unemployed	0	0%	0	0%	26	16%	12	9%
In School	0	0%	0	0%	0	0%	0	0%
Others	12	20%	7	10%	28	17%	34	25%
Total	60	100%	67	100%	162	100%	135	100%

Source: Author's survey

As of 2015, the SEZ is the main provider of employment in the village. More than a quarter of the non-farming household respondents in the village reported employment in the FAB as factory workers while more women reported employment in the SEZ than men. Aside from selling vegetables, meat, and other goods mainly in the local market, other occupations for women are having their small stores in their homes and providing services such as cutting hair and laundry.

It is very noticeable from Table 3 that a significant number of men and women are unemployed. Unemployment among men seems to be higher than women but if we consider the housewives who are looking for work, this figure will be much higher. Eighty-three percent (20 out of 24) of housewives respondents in the survey indicated the desire to look for employment either full time or part-time apart from their household responsibilities. This unemployment is despite the pronouncements of the farmers that there is scarcity of labor in the farm.

Before the introduction of farm machineries in the 1960s and the opening of the SEZ in 1972, women in the village participated in almost all tasks in rice farming tasks such as planting, weeding, threshing, drying, and milling. This changed with the introduction of tractors and mechanical threshers in the 1960s. However, transplanting remained in the domain of the women. Fegan (1989) have documented that women gained much from the introduction of straight-row transplanting as part of the green revolution technologies in the 1960s as they gain more employment in the farm. Transplanting was the dominant crop establishment method in the village until the mid-1970s. A one-hectare land typically employs 15-25 laborers to plant in one day. As seen in Table 4 below, 80% of the farmers interviewed prefer women planters because they are perceived by the farmers to be more agile than men in moving through the rows in the field. This is also the reason why farmers also prefer hiring women to do the manual weeding in their farms. Transplanting back then serves as a rare activity wherein the women can work at the same time as the men to earn a living for the household. Women usually start working at 12 years of age. The planting crew is organized and managed by a leader called the *cabecilla*. Farmers approach the *cabecilla* to schedule the day for planting. The farmers expressed that the *cabecilla-system* makes it easier for them to find and organize laborers. The system also assures them that laborers will be available in the most optimal time of planting. The *cabecillas* are also tasked to supervise the planting as well as disciplining the planters.

**Table 4. Preferences for Women Laborers among farmers and laborers**

	Yes	%	No	%	No Answer	%	Total	%
Preference for Women Planters	35	80%	5	11%	2	5%	44	100%
Preference for Women Harvesters among Farmers	2	5%	40	91%	2	5%	44	100%

Source: Authors Survey and Interviews

Then and now, women rarely participate in harvesting. Ninety-one percent of the farmers do not prefer women harvesters because they perceived harvesting as a difficult task for women to perform. Although there is no evidence to support this claim, this perception among farmers is a major reason why farmers tend to be discouraged in hiring women in harvesting. This perception tends to be also true among laborers. According to the interviews with 2 harvest leaders and 7 laborers, they expressed that most laborers in the village do not want to work with women in harvesting, as they are perceived as slow. Back then, after harvesting, threshing was done by women and children stumping the crops using their feet. Once paddies are threshed, the women and children gather the grains and put it in the sacks for storage. With the proliferation of threshing machines in the 1960s, this way of threshing slowly faded away in the village and threshing work became a man's activity.

According to the interviews, during the mid 1970s when the SEZ employment was taking-off, laborers became scarce in the village and farm wages increased. Skilled women planters found work as sewers in the garment factories and as assembly line workers. The *cabecilla* themselves also found work in the factories. Even though there were still few available planters in the village during that time, it was composed mostly of young girls with low skills and little experience in planting. Farmers expressed that once the *cabecillas* gained employment in the factories, the link between them and the planters was severed. Farmers lamented that organizing planting labor suddenly became very hard for them. Also, the *cabecilla* system was not only utilized for organizing labor for planting it was also used to transfer the knowledge and skills from one generation to another. Without *cabecilla* and the seasoned planters, no one taught the younger women in the village to properly transplant any more.

Because of this, farmers expressed that they had to change farming practices in planting. The most significant change is the shift to the broadcasting method from transplanting. Farmers explained that at first, they tried to preserve transplanting and settled for inexperienced planters but the quality of work was low and it was not worth the cost of labor. The farmers expressed that the combination of the scarcity of skilled planters and higher wages pushed them to shift to broadcasting. The rationale for farmers in shifting to broadcasting can be summarized by a quote from an interview with one long-time farmer in the village:

Majority of the planters before are women. When they got hired in the factories, it became very difficult to find skilled planters in the village and their daily wage also increased. Because the wage became higher while the quality of their work became slow, we chose to just broadcast our seedlings.

(June 2015, Interview Translated from Tagalog)

Transplanting, with its proper spacing, yields better than broadcasting as it allows spaces in between the seedlings for better nutrient and sunlight absorption and a room for the plant to grow. Furthermore, the spaces between the plants allow for good weed management without too much use of pesticides. Weeding used to be another task where women can earn daily wages in the village. With the shift to broadcasting, the spaces between the plants are no longer suited for manually weeding, thus farmers adopted the use of heavy chemical herbicides. Because transplanting and weeding are major farm activities where landless women can participate and earn money from the land, the shift to broadcasting marked the "de-feminization" of farming the village.

At first sight, it would seem that the FAB favors women as more women gain employment in the SEZ than men. In fact, many studies have suggested that industrialization is advantageous for women in the rural areas (Chant and McIlwaine, 1995; Price 1983; Rigg, 1997; Warr, 1984). Respondents of the interviews seem to agree that the skills of women in sewing and their dexterity and steady hands suit the garments factories and the assembly of semi-conductors. However, women tend to be in a more disadvantaged position than men with regard to SEZ opportunities. Women typically resign or stop working at the age when they are starting a family, when their family is growing, or when they are taking care of young children. Interviews among current and former women factory workers expressed that companies prefer to hire single women and tend not to hire pregnant workers as they avoid paying for health care or maternal benefits. This practice has been happening since the early days of the zone as confirmed in the study of Castro (1982) where results of her survey in 1980 showed that majority of the SEZ workers are single women. Furthermore, the preference of single female workers was also common in other SEZ in the country as cited by study of Chant and McIlwaine (1995) in their study of the Mactan Special Economic Zone. ICFTU (2004) and ILO (2003) meanwhile have cited that SEZs in the Philippines and other countries tend to practice discrimination in hiring pregnant women. Furthermore, since they will only earn minimum wages, women cannot afford to pay someone to take care of their young while they take their work shifts. Out of the 47 women respondents who work in the SEZ shown in Table 3, 35 are married. 22 out of these 35 women were further interviewed regarding their expected length of work in the SEZ. Among the 22 interviewees 18 or 82% indicated that they do not expect to stay long in working in the factories. This is confirmed in Table 5 where the results of the survey show that the average age of women working in the SEZ in the village is younger than men. The interviewees cited the lack of job security, contractualization, and the minimum wages as the main reasons why after childbirth, most women are forced to leave the factories and stay home as housewives.

**Table 5. Average Age of SEZ Employees in Town Site village**

Town Site		
Sex	Male	Female
Age	38	34.4
	36.2	

Source: Author's Survey

As seen in Table 5, the average age among men is still relatively young and interviews among men household members suggest that men can alternatively work in construction in the zone and they can also participate in the farm as laborers and harvesters while they wait for 5 months. These options are not available for women in the village. This is confirmed in Table 3 as no woman is engaged in construction work and only 1 woman out of 135 women surveyed reported working as a farm laborer. The situation of women is exemplified by the following quotes from two respondents from the village. One respondent was a daughter of a farmer. She didn't want to work in the farm so she tried working at the SEZ after graduating from high school, as most of women in the village did at her age. She expressed that:

I worked in the zone for almost 10 years after graduating from high school. I worked as a sewer making dresses for Barbie dolls. I had to stop working when I got married at 25 years of age. I have to because no one will take care of my child especially during night shifts and overtime.

(June 2015, Interview Translated from Tagalog)

Another respondent from the village was a daughter of a farm laborer and wife of a fisherman. She also started working in the zone at an early age and had worked until she had her third child. She lamented that:

I worked in the zone sewing bags for a long time. I have worked for at least 6 companies during those days. Every time I get pregnant I have to stop working. When my child is old enough, I immediately apply again. During that time, every time you apply to a new company you need to undergo trials again. When I got pregnant with my third child, I had to stop permanently from factory work because 3 kids is a lot of work at home.

(July 2015, Interview Translated from Tagalog)

It is ironic that even though more women are employed in the zone than men, many women, including housewives, also remain unemployed. Another irony is that although there are many unemployed persons in the village, farmers say they have difficulty finding labor. Women proved to be an untapped labor force in the village. Change in the preference for farming might explain this as a number of studies have cited the changing preference among rural folks for farming especially among the younger generations (Canlas and Pardalis, 2009; Manalo and van de Fliert, 2013). However, in the interviews among the 24 housewives, 83 percent (20 women) expressed that the lack of access to the farm labor market is also one of the reasons why they cannot get employment in rice farming.

**Table 6. Preferences of Planting Method among Farmers**

	Yes	%	No	%	Total	%
Preference for Transplanting	4	9%	40	91%	44	100%
Preference for Broadcasting	40	91%	4	9%	44	100%

Source: Author's Survey and Interviews

According to key informant interviews with 3 women who resigned from the SEZ, women in the village find their traditional roles as planters and weeders to have disappeared due to earlier shift to the broadcast method of planting as a reaction to labor scarcity created during the early industrialization in the village. As seen in Table 6, 91 percent of the farmers expressed preference to broadcasting. Farmers expressed that they find it hard to go back to transplanting. They have gotten used to the lesser capital needed for broadcasting compared to transplanting and have structured their household budget to it. According to the farmers, the return to transplanting would mean the need for additional capital to pay for the planters' wages that would mean loaning from the informal credit markets, which most risk adverse farmers are afraid to do.

In addition, women in the villages expressed in the interviews that they do not any more possess the skills and knowledge about planting. Farmers in the village express fear that the quality of planting today is not good and that the wages they will pay the laborer are not worth the value. Farmers also expressed in the interviews that they would rather do direct seeding than supervise and teach unskilled and slow planters. Because of this, older women in the village find themselves not only unable to participate in the SEZ but also unable to participate in the farm for livelihoods. Women in the village recognized that income from planting is a missed opportunity for them. The sentiments of women in the village are summarized by quotes from two housewife-interviewees. One is a wife of a construction worker and the other is a wife of a fisherman and daughter of a former *cabecilla* in the village.

I would like to earn a living from the farm but there is no chance. All of the tasks now are for men. Planting opportunities are very rare nowadays. If only there is still planting, I could earn extra for my family and help my husband in our family expenses.

(June 2015, Interview Translated from Tagalog)

My mother was a *cabecilla* but I never learned how to plant. I feel a little ashamed because I am daughter of a *cabecilla* who doesn't know how to plant. I worked in the zone as a sewer when I graduated high school and I didn't had the time to plant back then. Now, if only I knew how and if only there are planting opportunities, I could earn from the farm.

(June 2015, Interview Translated from Tagalog)

## Conclusion

Rural industrialization via the creation of SEZs is seen as a development policy by the Philippine government to increase employment and reduce poverty. This study started by asking how SEZs affect women access to farming. The findings of the study suggest that the labor-intensive nature of most SEZs firms such as garments and wearing apparel manufacturing creates a huge demand for women labor. This has been a welcome development in a country where unemployment and poverty is high in rural areas and such investments are a way to improve the situation. Many studies have shown that the creation of non-farm employment is a viable way to reduce unemployment while many studies also stress that the creation of non-farm jobs is mostly beneficial to women.

Findings of this study illustrated that early industrialization indeed benefited the rural folks, especially women, as it generated much needed employment for them. It still benefits women and men at the present, as it is the largest source of employment in the village. However, the creation of the SEZ tends to affect women's livelihoods negatively in the long term. At the present, although women find more employment in the SEZ, more women are unemployed than men in the village. Furthermore, women can no longer participate in rice farming as rice production has become "de-feminized" in the village.

Experience in this study suggests that SEZs can result in creating barriers for women to participate in farming, which in turn, can contribute to the unemployment of women. This is done in two prongs. First, the early industrialization in the rural village initiated labor saving farming practices or the shift to broadcasting method of planting from transplanting, due to the migration of skilled planting labor from the farm to the factories. This change has resulted in the disappearance of the women's traditional roles of transplanting and weeding which represents the main activities wherein they can earn from the farm. Second, in recent decades, labor policies in the SEZ aimed at reducing labor cost where initiated namely contractualization and paying the minimum wage. These labor policies dis-incentivized women in having long-term careers in the zone due to complications regarding the women's life cycle especially after marriage and child bearing. As a result, women who can no longer work in the SEZ find themselves also unable to earn a living in the farm as they find their traditional roles in rice farming to have disappeared because of earlier adjustments in rice farming practices.

This study provides a different view on the effects of SEZ on women employment. It cautions us on the sweeping claim that SEZs and employment in the non-farm sector empowers women. As illustrated in this study, such benefits can be true in the early stages of the lives of the women but may have different effects in their later life stages. This study also underscores that rural industrialization may provide benefits among the disadvantaged groups in the rural society but may have latent and indirect effects on the other sectors such as on agriculture which may result in negative effects in the long run for rural people especially among women.

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