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Knowledge Sharing on Korea's Development in Women's Policies

Policies for Women's Vocational Education and Business Start-ups in Korea

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Korean Women's Development Institute (KWDI) is a government-affiliated think-tank under the Prime Minister's Office of South Korea. It has contributed to realizing gender equality, improving women's social participation and welfare and advancing family life and state through comprehensive researches on women's policies.

Foreword

South Korea has transformed itself from being an aid recipient to an aid donor since achieving an unprecedented economic growth in the last five decades. Such growth was not confined to economics spheres only, but also apparent in social spheres. Women's advancement was one of the areas which witnessed a dramatic transformation.

While there have been efforts to share Korea's development experience through means of Knowledge Sharing Program (KSP) spearheaded by South Korea's Ministry of Strategy and Finance (MOSF) and Development Experience Exchange Partnership (DEEP) by the Ministry of Foreign Affairs, there hasn't yet been an initiative with a comprehensive approach to share women's advancement experiences. The current study is the first of its kind to compile case analyses of women's development in various areas of the South Korean society.

"Policies for Women's Vocational Education and Business Start-ups in Korea" is an essential part of KWDI's multi-year ODA project entitled "Strengthening Gender Equality Policy Infrastructure in the Asia-Pacific Region". This is a project aimed at establishing political and social infrastructure for gender-equal policy in the Asia-Pacific region. By promulgating these research findings through means of policy consultation, workshops and international conferences, KWDI hopes Korea's development experience in relation to gender equality will be beneficial to its partner countries. Moreover, KWDI hopes that this knowledge-sharing will foster potential gender-related ODA projects that the South Korean government can collaborate and cooperate on with its partner countries to promote gender equality in the region.

I hope the concerted efforts made by KWDI and partner countries will bring substantive and positive changes in the lives of women in Asia.

Myung-Sun Lee, Ph.D.

President

Korean Women's Development Institute

Table of Contents

I. Women's Vocational Education Policy in Korea	1
1. Background	3
2. Chronological Changes and Achievements of Women's Vocational Education	9
3. Evaluation and Implications	31
II. Women's Business Start-up Policy in Korea	37
1. Background	39
2. Legislation, Systems, and Key Projects for Promoting Women-led Start-ups	45
3. Achievements and Implications of Women-led Start-up Activation Policies	55
■ Reference	57

List of Tables

<Table I -1> The number of vocational high school students in the 1950s by gender	10
<Table I -2> The number and proportion of female students in vocational high schools	16
<Table I -3> Main vocational education policies	17
<Table I -4> Increase in the number of vocational high schools in the 1960 and 1970s	19
<Table I -5> Trends in the distribution of female students in vocational high schools by school type	21
<Table I -6> The number of male and female students in special classes and schools attached to industrial firms (1990)	28
<Table II -1> Growth in the number of women-led enterprises	43
<Table II -2> Summary of the Act on Support for Women-owned Businesses	47

List of Figures

[Figure I -1] The number of vocational high schools in the 1950s	10
[Figure I -2] The number of vocational and technical high schools in 1958 by region	11
[Figure I -3] The number and proportion of students in public schools by gender and year	13
[Figure I -4] The number of vocational high school students and trends in the proportion of female students	20
[Figure I -5] The number of commercial high school students and trends in the proportion of female students	22
[Figure II -1] Rate of growth in the number of women-owned and men-owned enterprises	44
[Figure II -2] Distribution of women-owned enterprises by business type	44
[Figure II -3] Small and Medium Business Administration's Projects Supporting Women-Led Enterprises	49

I. Women's Vocational Education Policy in Korea

1. Background	3
2. Chronological Changes and Achievements of Women's Vocational Education	9
3. Evaluation and Implications	31

1. Background

Korean women's educational levels reached 83 % of women going to college, which can now be considered a complete transition to higher education (The Ministry of Education, 2010). It should be acknowledged that vocational education for women, which was introduced together with Western-style modern education system, played a considerable role in this unbelievable development of Korean women's complete transition to higher education.

Together with the introduction of the modern education, more direct vocational education, including sericulture and practical courses, was offered for women. This process evolved to vocational education in a diversified form after the liberation from the Japanese rule (1910-1945). As Korea began to be modernized in full swing in the 1960s, vocational schools for women appeared in diverse forms, including day and evening vocational high schools, attached schools or evening classes at industrial firms. It is undeniable that these schools played a pivotal role in improving Korean women's secondary education.

Meanwhile, vocational education gave opportunities for minor women workers, who worked in industrial complexes at the forefront of constructing a modern homeland, to work and study at the same time. Through work, the workers could make a living for themselves and their family, while developing their career through free education provided by the industrial firms they worked for.¹⁾

Korea was able to achieve these effects thanks to Korean women's enthusiasm for learning and their deep-rooted sense of responsibilities for supporting their families rather than due to its introduction of a meticulous and valid policy.

1) Another aspect of this policy is that the policy was initiated to keep the cheap labor of young workers for a long time rather than to focus on the career development of the individual workers. However, it should be acknowledged that the policy eventually had a positive effect of enabling the nation's industrial development and individuals' continued study. Of course, the extortion of the labor from minor workers and suppression of individuals' personal life remain as shadows of Korea's economic development.

However, it is believed that Korean cases of establishing a policy and putting it into practice will offer practical help for developing countries in resolving their agendas of developing advanced workforce and improving their low education levels.

A. Introduction of Women's Modern Vocational Education

It is said that Korea's vocational education as full-scale formal education became active after the *Gabo* Reform of 1894, when the country introduced Western-style modern education system (Won-ho Lee, 1995). Based on the demand of the time, the government established vocational schools for medicine, agriculture, commerce, industry, mining, postal service, and sericulture. Because there were no restrictions on gender when recruiting students except for some industries, it can be said that women's vocational education started after the enlightenment period of the late nineteenth century.

The first national vocational school was founded based on the Royal Edict No. 7 Regulation on Medical School (March 1899) and the Royal Edict No. 28 Regulation on Commercial and Industrial School (June 1899) promulgated to expand basic education and the government's implementation of vocational education. However, the first women's vocational education began in 1901, when the Ministry of Agriculture, Commerce, and Industry recruited both "men and women" for students of sericulture and laboratory while running sericultural educational institutes.

Vocational education during the Japanese colonial rule (1910-1945) includes the implementation of the first Joseon Education Decree through the third Joseon Education Decree. During this period, vocational education was conducted in a fairly limited manner. Prior to the issue of the first Joseon Education Decree in 1911, women's vocational education focused on practical course education. In

higher common schools, business and handicraft in agriculture or commerce were required courses and in girls' higher common schools, relatively much time was allocated to housekeeping, sewing, and embroidery as required courses. Through these courses, vocational education was practically performed (Cheon-seok Oh, 1964).

In 1922, the second Joseon Education Decree made agriculture, commerce, and business courses in higher common schools in the name of cultural politics and operated the courses identically with Japan's five-year middle schools. The decree made girls' higher common school a four-year course the same as Japanese girls' high school, and revised technical and vocational schools in such a way that those who completed the common school can enter them.

Though the number of women among the vocational school students from 1915 to 1925 has not been confirmed, in the case of vocational supplementary schools, women, who accounted for approximately 10 % of men with 214 men and 25 women in public industrial schools, went to vocational supplementary schools. As temporary vocational schools were abolished, vocational supplementary schools were established by the Decree of the Ministry of Education in 1910 with a goal to provide education necessary for workers in related industries. These supplementary schools were similar in goals to vocational schools, but different in that the duration of study was shortened to two years.

From 1925 to 1931, the number of women in vocational schools and vocational supplementary schools increased, albeit slightly. Among vocational schools, the number of women (344 persons) at private commerce schools turned out to be about a third of the number of men (1,005 persons). Among vocational supplementary schools, the number of women at public industrial schools was still about 10 % of the number of men (Kenichi Ono, 1936). In the case of public industrial schools among vocational supplementary schools, there were schools for women, including Suncheon (Pyungbuk Province) Public Girls' Enterprise Supplementary School and Heecheon Public Girls' Enterprise Supplementary School. Therefore,

it is judged that women, albeit very few in number, could get the opportunities to have vocational education. Also, as the manufacturing industry included a few businesses such as dyeing and metal craft where women could get jobs, it can be interpreted that the manufacturing industry was more open to vocational education than other industries.

In 1938 when the third Joseon Education Decree was issued, the Sino-Japan War and the Pacific War necessitated mobilization of workforce and supply for war materials. As a result, the scope of vocational education greatly widened. With the establishment of more schools, including 40 agricultural, industrial, and commercial vocational schools, 43 agricultural, industrial, marine, commercial, and vocational supplementary schools, and 9 girls' vocational schools, women had more opportunities to get business-related education. Subsequently in January 1943, the Secondary School Decree was promulgated together with the regulation related to women's vocational education. The decree included provisions about girls' high schools. During the colonial rule, girls' high school students were required to complete subjects and practice. As there were practical courses, students were required to participate in farming work through practice if they did not complete agriculture courses. It is confirmed that when the fourth Joseon Education Decree was issued in 1943, private girls' vocational schools consisted of a total of three schools and 27 classes, including Gyeongseong Girls Commercial School, Deokseong Girls' Vocational School, and Hyangsang Girls' Vocational School (Won-ho Lee, 1995).

B. Development of Women's Vocational Education and Policy Goals

Vocational education in the 1950s after the Japanese colonial rule was a process of changing the education system of the Japanese rule. With the promulgation of the Secondary School Decree and the enactment of the Education Act, the curriculum of vocational high schools and women's vocational education changed to be more open than before. As a consequence, the education was conducted with emphasis not only on previously women-centered housework but also on male-oriented industries, including agriculture, industry, and fisheries.

The number of women rose gradually in other vocational high schools, but basically women who could hardly enter regular educational institutions laid their educational basis, including vocational education, through non-regular educational institutions, including civic schools, higher technical schools, and technical schools.

Vocational education in the 1960s was in line with the industrialization process according to the National Economic Development Plans. Under the slogan of "Education Contributing to Economic Growth," Korea promoted vocational high schools to meet the demands for technical workforce from industrial National firms, according to the implementation of the First and Second Five-year Economic Development Plans.

To attain the policy goals of the vocational education promotion policy of 1963, the Ministry of Education operated vocational schools and vocational and technical training centers for short-term training of mechanics needed to perform the Five-year Economic Development Plans, retrained teachers in charge of practical courses, restructured four vocational schools nationwide to five-year vocational schools, and newly established scholarship system. Vocational schools for training intermediate technicians were set forth as official school system by the revision of the Education Act of 1963.

In the 1960s, Korea pursued policies to promote vocational high schools as

vocational education institutions and to facilitate more girls to enter high schools. Commercial high schools, where a lot of girls attended, provided workforce necessary for economic development as girls got to work immediately after their graduation.

In the 1970s, as industrialization was right on track, vocational education reached the height with the establishment of schools attached to industrial firms. According to the transition from light industry-centered growth to heavy chemical industry, there was an urgent call for training of industrial technical labor. The Third Curriculum was revised in 1973 to include nurturing basic abilities, grasping basic concepts, fostering judgment and creativity, and strengthening the industry-academy cooperative education.

In particular, the industry-academy cooperative education was designed to contribute to national economic development by having students understand the close relations between theory and practice and by applying technology and knowledge learned from school to production (Four-Decade Education History Compilation Committee, 1988). In addition, Korea conducted policies to promote enterprises to educate and train young female workers by establishing schools attached to industrial firms, including large-scale textile factories, or special classes to small and medium-sized enterprises. Especially, the country encouraged a number of young female workers from rural villages to work and study at the same time by establishing dormitories in the factories and by providing boarding and meals.

As the Fifth Economic Development Plans were underway in the 1980s, the perception of vocational education shifted from quantitative to qualitative growth. As a result, a new curriculum for vocational schools was made and operated in 1984, which led to revisions, such as reducing the number of subjects through integration of majoring subjects, newly establishing basic practice courses, and strengthening practice education. Compared to the 1970s, this period saw a slight decrease in vocational education in schools. As vocational education was divided into government-led vocational ability development projects and private-led vocational trainings, women-specific vocational trainings thrived during this period.

2. Chronological Changes and Achievements of Women's Vocational Education

A. Changes and Achievements of Women's Vocational Education in the 1950s and 1960s

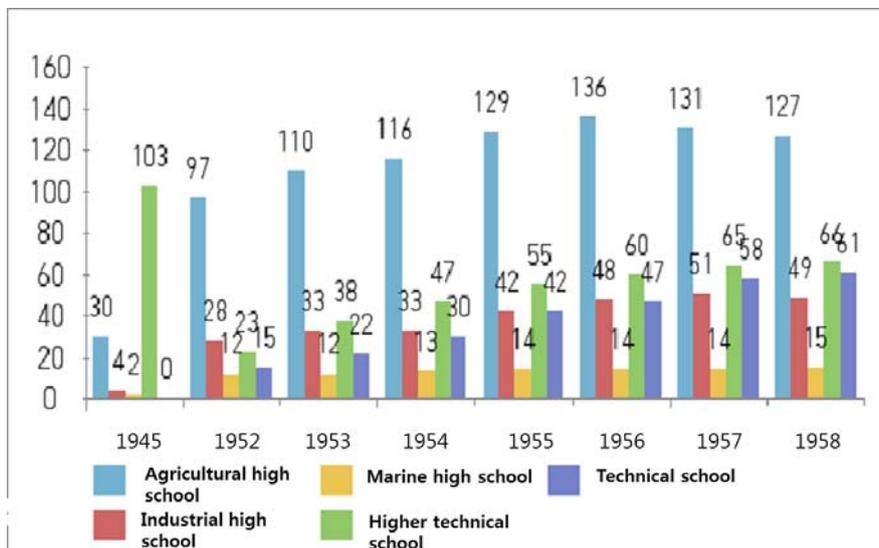
The 1950s was a period when Korea restructured educational administration and management system with emphasis on clearing off the vestiges of Japanese imperialism and sharpening knowledge and skills suitable for practical life. In the 1950s, the number of female students in agricultural, industrial, marine, higher technical, and technical schools was on the constant increase. Higher technical schools and technical schools were founded in accordance to the Education Act of 1949. They were similar to former vocational supplementary schools in that they were designed to teach skills needed for practical occupations for people who could not afford to attend regular schools and that they could be established and operated at factories and commercial areas. Higher technical schools and technical schools differ in academic levels of students. Technical schools provided middle school courses for graduates from elementary and civic schools, while higher technical schools provided courses for graduates from three-year technical school or middle school. The statistics of vocational high schools in the 1950s show a sharp hike in the proportion of female students in higher technical schools and technical schools since 1953, when the Korean War entered armistice agreements.

<Table I -1> The number of vocational high school students in the 1950s by gender

(Unit: persons, %)

	Agricultural high school		Industrial high school		Marine high school		Higher technical school		Technical school	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1945	9,051	-	2,663	-	628	-	12,784	-	-	-
1952	36,759	191	13,474	52	2,700	-	1,599	399	1,249	139
1953	36,163	252	20,042	48	2,883	1	2,445	1,048	1,858	465
1954	45,279	287	26,990	57	3,814	6	3,404	1,460	2,258	1,019
1955	46,871	410	31,513	25	5,016	2	3,976	1,705	2,976	1,411
1956	49,051	471	34,179	73	4,210	16	4,301	1,844	3,437	1,473
1957	43,086	717	34,141	110	3,260	26	4,553	1,952	4,551	1,951
1958	35,503	852	32,248	101	3,211	41	4,798	1,867	4,726	2,206

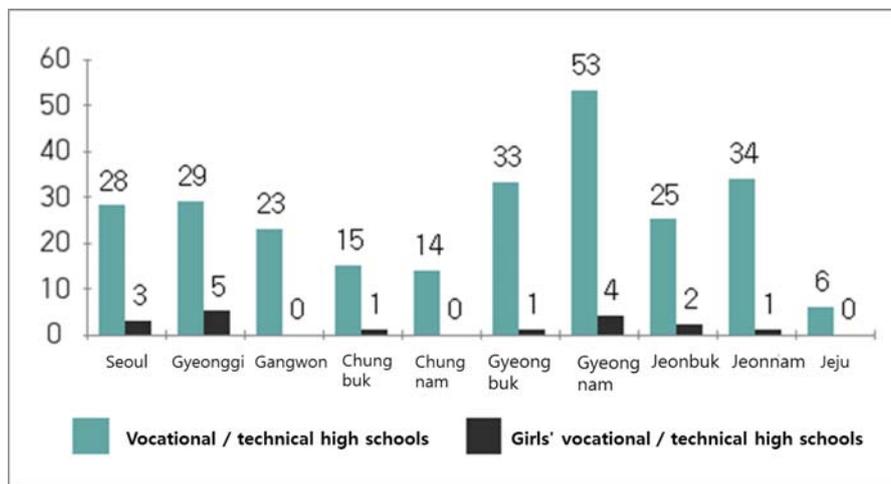
Source: Won-ho Lee (1995). Vocational Education. Korean Educational Research Association, The Korean Society for the Studies of Educational History.



Source: Won-ho Lee (1995). Vocational Education. Korean Educational Research Association, The Korean Society for the Studies of Educational History.

[Figure I -1] The number of vocational high schools in the 1950s

In 1958, the number of vocational and technical high schools was distributed as follows by region: 28 schools in Seoul, 29 in Gyeonggi, 23 in Gangwon, 15 in Chungbuk, 14 in Chungnam, 33 in Gyeongbuk, 53 in Gyeongnam, 25 in Jeonbuk, 34 in Jeonnam, and 6 in Jeju. High schools were classified into girls' commercial high school, girls' homemaking high schools, and girls' healthcare schools. A total of 17 schools were distributed by region and under operation, with 3 schools in Seoul, 5 in Gyeonggi, 1 in Chungbuk, 1 in Gyeongbuk, 4 in Gyeongnam, 2 in Jeonbuk, and 1 in Jeongnam.



Source: Won-ho Lee (1995). Vocational Education. Korean Educational Research Association, The Korean Society for the Studies of Educational History.

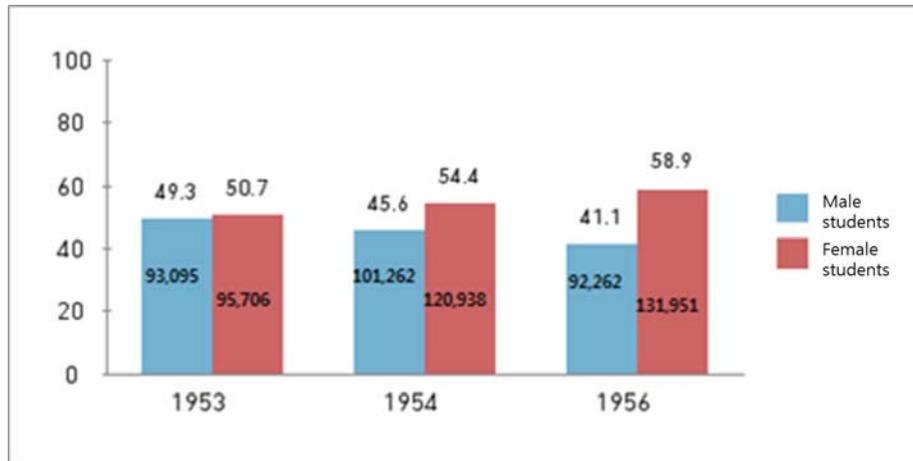
[Figure I-2] The number of vocational and technical high schools in 1958 by region

Civic schools in the 1950s played an important role in providing educational opportunities for the people. School-aged children entered regular schools, while youths and adults who passed the school age attended civic schools at the elementary level and higher civic schools at the middle school level. Considering that there were 13,072 civic schools and 1,039,631 students in 1950, it is easy to guess how strong the will of the people and the government was to achieve

literacy. Also, judging from the fact that there were 689 higher civic schools and 83,066 students in the same year, they had strong will for education even in the midst of the war.

Among the adult educational institutions, civic schools and higher civic schools had the following number of students by gender and by year. In 1953, civic schools had 95,706 female students (50.7%) and 93,095 male students (49.3%), showing a similar proportion of male and female students. In 1954, civic schools had 120,938 female students (54.4%) and 101,262 male students (45.6%), with the proportion of female students 8.8% point higher than that of male students. In 1956, civic schools had 131,951 female students (58.9%) and 92,262 male students (41.1%). With the proportion of female students 17.8% higher, the number of female students gradually rose. This can be because women had less opportunities to enter regular educational institutions, the number of women who entered non-regular educational institutions went up.

In 1956, elementary schools had a total number of 2,870,018 students, and of this, male students accounted for 58.1% and female students 41.9%, with the proportion of male students 16.2 % point higher than that of female students. Middle schools had a total number of 445,990 students, with 75.9% of male students and 24.1% of female students, showing the proportion of male students 51.8% point higher than that of female students. High schools had a total number of 272,511 students and showed the proportion of male students 64.0% point higher than that of female students, with 82.0% of male students and 18.0% female students. This situation shows that as students go to higher-level schools, the proportion of female students sharply fell. This is interpreted as the influence of the dichotomous thinking about the division of gender roles, that Korea's traditional society had high expectations toward sons while considering daughters as those who would stay at home as housewives. Thus, women had merely elementary education and could hardly go to middle and high schools.



Source: The Bank of Korea, Research Department(1955, 1956), Economic Yearbook.

[Figure I-3] The number and proportion of students in public schools by gender and year

The 1960s was a period when economic development plans began fully and when education policies put even more emphasis on vocational education. With a goal to conduct education contributing to national economy in 1964, the government presented the directions for promoting learning among the educational policy indicators. The directions included the eradication of poverty in 1961, the reinforcement of vocational and technical education in 1962, and the promotion of science and technology education to improve laborers capabilities in 1963. The details of investment in the "promotion of science and technology" in the first Five-year Economic Development Plan show that a total of 5.26 billion won was invested in 215 vocational schools, 9 higher vocational schools, and 11 vocational universities (Four-Decade Education History Compilation Committee, 1988). From this, we can see the policy will to develop vocational education.

As vocational education was on the track, the Industrial Education Promotion Act of 1963 and the second Curriculum were promulgated. The Industrial Education Promotion Act (Act No. 1403) suggested supporting technical education by the government, local governments and school foundations and providing favorable

treatment for vocational school students (Won-ho Lee, 1995). As a result of this government policy, girls' vocational schools increased to 15 schools, and overall, the number of vocational schools and their students greatly went up too.

In 1963, the second Curriculum was also proclaimed. Since 1958, the Ministry of Education had conducted rudimentary surveys for the revision of the curriculum and prepared the draft proposal for the curriculum. After conducting opinion surveys of more than 600 schools and consultations, the ministry promulgated the second Curriculum called life-centered and experience-centered curriculum. This curriculum emphasized autonomy, productivity, and usefulness of the curriculum. In particular, its emphasis on productivity led to an emphasis on vocational education in the curriculum and expressed as strengthening vocational education as well as science and technology education.

In response to the demands at the time, vocation high schools, first of all, greatly raised the proportion of vocation-specific subjects. For these vocation-specific subjects, the curriculum rejected theory-centered learning and instead selected subjects with practical use. Also, the curriculum emphasized experiment, integration and combination of practical and theoretical courses, and practice, with a goal to foster intermediate technicians. With unit system as a principle, it allowed to make time planning flexible by setting a range of time hours per week between minimum 34 hours and maximum 37 hours.

With a goal to raise intermediate technicians along with performing the five-year Economic Development Plans, the government established higher vocational schools in August 1963. Higher vocational schools have five-year duration of study after graduation from middle school and experimental practices by independent curriculum. In 1964, higher vocational schools opened as public schools, including four industrial high schools and one higher marine school together with four private schools. In 1966, they were gradually expanded to 16 schools, reaching a total of 23 schools until 1969. Graduates from the schools got employed relatively easily. The ratio of general to vocational schools reached 48.1 to 56.1,

and the ratio of the number of students in these schools increased to 55.5 to 44.5. However, because the duration of study was a long term with five years, dropouts rose in number. When they were employed, their lack of basic knowledge was also pointed out as a problem. Since 1970, the number had decreased until 1976, when vocational high school system disappeared.

Since 1965, the Ministry of Education had focused on the establishment of more vocational high schools to balance the ratio of humanities high schools to vocational high schools. As the Ministry not only restricted the establishment of humanities high schools but also encouraged their shift toward vocational and comprehensive high schools, vocational high schools increased in quantity in the 1960s. Compared to middle schools, humanities high schools tended to reduce in quantity compared to the previous years, but vocational high schools constantly rose in number from 280 schools in 1960 to 481 schools in 1970. This increase in rate was very high compared to that of humanities high schools, and the number of students almost tripled.

Among vocational schools, agricultural high schools remained almost the same in number although the number slightly increased in the 1960s. Industrial high schools went up about 30%. Compared to 1963, comprehensive high schools soared in number in 1970 to 45 national and public schools and 32 private schools. Commercial high schools expanded outstandingly as the number of national and public schools sharply rose from 42 to 63 and private schools from 51 to 91. As such, it is true that vocational high schools greatly contributed to expanding high school educational opportunities for female students. The proportion of female students to high school students was a mere 33.4% in 1965, but it hiked to 48% in 1994. This increase came mostly from the increase in their entrance to vocational high schools (Yeong-hwa Kim, 1991).

<Table I -2> The number and proportion of female students in vocational high schools

Year	Agricultural high school			Industrial high school			Commercial high school		
	Total	Female students	Proportion	Total	Female students	Proportion	Total	Female students	Proportion
1965	42,853	2,347	5.5	36,980	577	1.6	67,614	25,910	38.3
1970	41,178	5,320	12.9	68,367	612	0.9	100,636	50,592	50.3
1975	42,011	2,593	6.2	123,571	1,176	1.0	190,208	114,017	59.9
1980	53,678	2,467	4.6	200,367	-	0.0	323,816	230,638	68.1
Year	Marine high school			Vocational /comprehensive high schools			Total vocational high schools		
	Total	Female students	Proportion	Total	Female students	Proportion	Total	Female students	Proportion
1965	42,853	148	4.7	21,827	5,896	27.0	172,436	34,879	20.2
1970	41,179	229	5.8	59,520	19,245	32.3	273,662	75,988	27.8
1975	42,011	327	4.2	109,344	39,094	34.8	472,983	156,207	33.0
1980	53,678	171	2.4	32,571	19,419	59.6	617,529	242,684	38.3

Source: Jae-in Kim, Ae-gyeong Yang, Hyeong-ran Huh & Hyeon-ok Yu (2000). Study of Changes in Korean Women's Education: Establishment of Modern Women's Education and Gender Equal Education. Korean Women's Development Institute Research Report.

B. Changes and Achievements of Women's Vocational Education in the 1970s and 1980s

While the 1960s focused on nurturing industrial workforce to implement the Five-year Economic Development Plans, the 1970s required fostering mechanics needed to implement the strategies for heavy chemical industrialization. National interest in and support for vocational education had impacts on the increase in vocational education for women as well. Social and economic changes and vocational education policies in the 1960s and 1970s are as shown in <Table I -3>.

〈Table I -3〉 Main vocational education policies

	Social and economic needs	Main vocational education policies
1960s	<ul style="list-style-type: none"> ○ Nurture industrial workforce to implement the 1st and 2nd Five-year Economic Development Plans 	<ul style="list-style-type: none"> ○ Enacted the Industrial Education Promotion Act (1963, Act No. 1403) ○ Established the vocational curriculum (1963) ○ Newly founded vocational high schools (1963) ○ Prepared special accounts to expand vocational education facilities (1967) ○ Newly installed special allowances for teachers in charge of practical courses (1968) ○ Implemented five-year plans for promoting science and technology education (1967-1971)
1970s	<ul style="list-style-type: none"> ○ Foster mechanics needed to implement the 3rd and 4th Five-year Economic Development Plans centered on heavy chemical industry 	<ul style="list-style-type: none"> ○ Prepared a plan for electronic calculator education (proposal) (1970) ○ Revised the vocational curriculum (1971) ○ Made a policy on the promotion of agricultural high schools on a trial basis (1972) ○ Established a plan for reinforcing heavy chemical industrial education (1973) ○ Amended the Industrial Education Promotion Act: institutionalized the industry-academic cooperation system (1973) ○ Amended the National Technical Qualifications Act (1973) ○ Specialized industrial education (1974-1978) ○ Amended the Education Act (1976): Established secondary schools and special classes attached to industrial firms

Source: Moo-geun Lee (1993), Principles of Vocational Education (Seoul: Kyoyookbook)
 Jong-cheol Kim (1990), Study of Korean's Education Policies (Seoul: Kyoyookbook)
 The Ministry of Education (1983), Korea's Educational Reform in the 1980s: White Paper on Educational Administration

In the 1970s, Korea shifted its policy focus from light industry-centered growth to the promotion of heavy chemical industry. Accordingly, the supply of workforce needed to implement the strategies for heavy chemical industrialization emerged as an important educational agenda in the 1970s. The transition from the light industry to the heavy chemical industry raised the needs for developing technical workforce. At this, the government prepared a plan for strengthening

heavy chemical industrial education in 1973 and carried out the plan afterwards. The gist of this plan was to foster technical workforce required for the promotion of heavy chemical industry until 1981 and to improve the contents of industrial education. This plan led to a policy on the specialization of industrial high schools in 1974. This policy divided industrial high schools into four types: 1) mechanical technical high schools to nurture precision mechanics in order to train and supply mechanics necessary for specific industry in a short term, 2) model industrial schools to foster mechanics who want to work overseas, 3) specialized industrial high schools to train on-site mechanical workforce necessary for specific industry, and 4) general industrial schools. The government then provided differential support for these schools, such as intensively supporting and promoting the three types of schools except for general industrial schools.

In the meantime, grounded on the National Technical Qualifications Act of 1973, the national technical qualification system took effect in 1975. The national technical qualification system was designed to boost the morale of students who acquired industrial technology from vocational schools and to contribute to improving their technical levels. In the 1970s, therefore, the policy on the promotion of industrial education to develop mechanics constituted the main part of vocational education policy.

In the 1970s, Korea witnessed the rise of huge monopoly capital due to its export-driven economic growth policy. Factory and office workers crowded in large numbers around large enterprises and socialization of labor made a big progress. As the rapid economic growth and large-scale industrialization required high quality workers, the government reviewed the necessity for qualitative changes of labor through education. This was in agreement with the purpose of establishing schools attached to industrial firms. Emphasizing vocational training with the amendment of the Vocational Training Act in 1973 and the promulgation of the Special Measure Act on Vocational Training in 1974, the government aimed to expand high quality workforce.

As vocational education institutions, vocational high schools offered basic occupational education at high school levels. By industry, they were divided into various types of high schools, including agricultural, commercial, and marine/transport high schools. The purpose of vocational schools was to develop industrial technical workforce and to foster vocational abilities needed for individuals. These vocational high schools greatly contributed to personal, national, or social development (The Ministry of Education, 1998). While male technicians were produced largely in industrial high schools, a high proportion of female workers came from commercial high schools. Girls usually went to commercial high schools and got office jobs at enterprises in the manufacturing industry or social service rather than going to college after graduation. It is assessed that they took an active part in economic development as a considerable workforce.

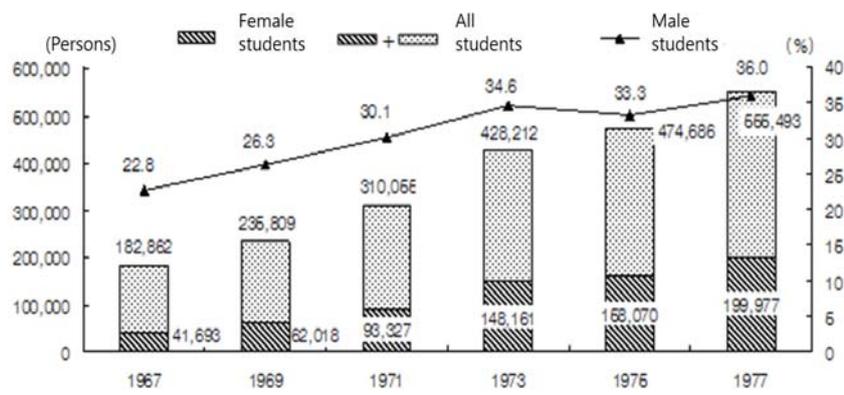
As shown in <Table I-4>, the number of all vocational schools sharply rose from 368 schools in 1968 to 481 schools in 1970 as a result of implementing the policy on the promotion of vocational education. As the number constantly increased to reach 574 at the end of the 1970s, vocational schools firmly positioned themselves as professional institutions in charge of vocational education.

<Table I -4> Increase in the number of vocational high schools in the 1960 and 1970s

Year	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
No. of schools	368	425	444	481	500	539	563	476	479	484	499	536	574

In commercial high schools, the proportion of female students gradually went up to reach more than a half in the 1970s. In all vocational high schools, the number of female students grew much faster than that of male students. That is, the percentage of female students in vocational high schools was a mere 20% in 1965 but it almost doubled to 38.3% in 1980.

In the early stage, the proportion of male students was high in vocational schools, but in the 1970s, the proportion of female students steadily increased. As can be seen in [Figure I-4], the proportion of female students to all vocational high school students was a mere 22.8% in 1967, but it began to surpass 30% in the early 1970s and approached 40% in the late 1970s.



[Figure I-4] The number of vocational high school students and trends in the proportion of female students

Capitalizing on the continued vocational education policies in the 1960s and the 1970s, commercial high schools, where lots of female students entered, constantly increased in number. Accordingly, the proportion of female students in commercial high schools to all vocational schools steadily rose. We can confirm this over-distribution of female students in commercial high schools by examining the proportion of female students in vocational high schools by school type as shown in <Table I-5>. When the distribution of female students in vocational high school is examined by school type and by year, female students in commercial high schools took up between 75% and 83% among female students enrolled in all vocational high schools. The proportion of female students in industrial high schools rose from 1.4% to 4.4%, but the proportion in agricultural and marine high schools gradually decreased from 5.4% to 1.0%.

After all, most of Korea's female students in vocational high schools were those who attended commercial high schools. This shows how the commercial high schools turned feminine (Hae-sook Jeong, 1998).

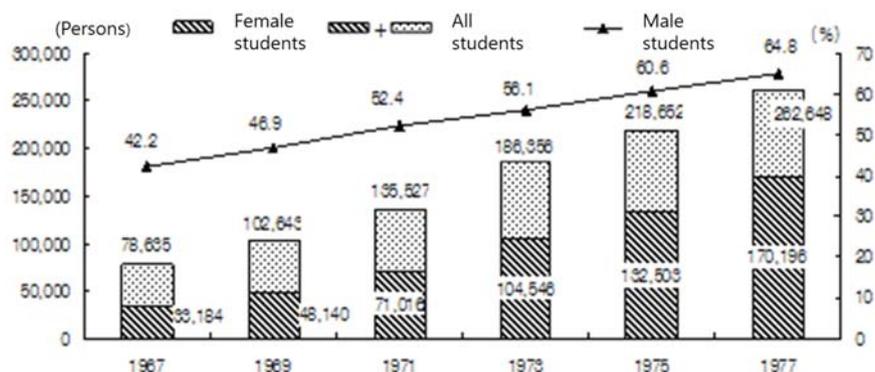
〈Table I -5〉 Trends in the distribution of female students in vocational high schools by school type

(Unit: persons, %)

Year	Total	Commercial	Industrial	Agricultural / marine	Other
1967	41,713	33,222	580	2,245	5,666
	(100.0)	(79.6)	(1.4)	(5.4)	(13.6)
1972	113,758	85,782	1,493	5,615	20,868
	(100.0)	(75.4)	(1.3)	(4.9)	(18.3)
1977	200,173	170,238	7,628	3,828	18,478
	(100.0)	(85.0)	(3.8)	(1.9)	(9.2)
1982	378,646	316,817	16,562	3,667	41,600
	(100.0)	(83.7)	(4.4)	(1.0)	(11.0)

Source: The Ministry of Education, Statistical Yearbook of Education, Each year.
(kess.kedi.re.kr)

The proportion of female students to commercial high school students was 42.2% in 1967, then increased to more than a half in 1971, reaching 52.5%. With a continued swift rise since then, the proportion accounted for more than two thirds in 1978, standing at 66.7%. This increase had continued until the 1990s, then stalled afterwards, but still the proportion of female students in commercial high schools took up a large portion, to the point of almost reaching full capacity.



Source: The Ministry of Education, Statistical Yearbook of Education, Each year.
(kess.kedi.re.kr)

[Figure I -5] The number of commercial high school students and trends in the proportion of female students

In sum, the government strengthened its vocational education policy to supply technical workforce in a short time since the 1960s and 1970s. Through this policy, the government provided opportunities for vocational education for female youths in the secondary school age group. Girls preferred commercial high schools to industrial high schools, which fostered technical workforce. In response to the social demand for commercial school graduates, lots of female students in commercial high schools got clerical jobs, such as keeping ledgers or books at enterprises in the manufacturing industry or social services rather than going to college after graduation. As such, it is assessed that they contributed to economic development back then as considerable workforce. According to the data of Administration of Labor, office workers among female graduates from commercial high schools recorded 65.9% in 1970, 58.5% in 1975, and 51% in 1980 (Administration of Labor, 1972).

As the Five-year Economic Development plans were in progress in the 1980s, the awareness of vocational education shifted from the previous quantitative growth to qualitative growth. Accordingly, the government established and operated a new curriculum for vocational schools in 1984. Then it revised the curriculum

through integration of specializing subjects to reduce the number of subjects, to newly establish basic practice courses, and to strengthen practical education. At the same time, policy support for and investment in vocational education at high school level sharply shrank in the 1980s. The proportion of vocational high school students, which had reached 43.3% in 1980, dropped to 35.9% in 1989, showing the trend for high school education to turn to humanities education. Vocational education slightly weakened in 1989 compared to 1980, with the proportion of agricultural high school students falling by 0.4% and that of industrial high school students rising by 0.8%. Nevertheless, commercial high schools continued to grow, with an increase of 44.1%. With the proportion of female students in commercial high schools taking up 80.0%, these commercial schools clearly tended to be predominantly female (Hae-sook Jeong & Gyeong-A Jeong, 1997).

C. Changes and Achievements of Women's Vocational Education Other Than Regular Curriculum

Unlike large companies which could secure cheap labor based on stable employment policy, small- and medium-sized enterprises had difficulty securing labor because of their relatively poor working conditions and unstable employment. While large companies with 500 employees or more were short of 7.5% of labor, small enterprises with less than 10 to 29 employees showed a labor shortage of almost 44% (Soon-gyeong Jo, 1989). As the shortage of unskilled mechanics in the light and manufacturing industries aggravated during the period when the Fourth Five-year Economic Development Plan was implemented, the government and the ruling party decided in their joint meeting in July 1976 to take measures to send workers in industrial complexes to evening middle schools. To this end, measures were taken to expand welfare facilities at enterprises and to have the government support evening classes and schools attached to industrial firms. As

a result, special classes and schools attached to industrial firms for education of young workers at industrial firms began to be established, in accordance with the Act promulgated on December 31, 1976. On March 1, 1977 when the classes and schools opened, 381 industrial firms participated in providing opportunities for numerous working youths to attend secondary education. Accordingly, 10,505 youth workers attended 181 classes in 30 schools. Afterwards, the number of schools increased to 41 schools in 1988, which prospered while teaching 47,000 students (The Chosun Ilbo newspaper Column, February 2, 2006).

However, enterprises in all business types did not secure labor through schools attached to industrial firms. Those business types intensively requiring raw labor forces preferred schools attached to industrial firms to secure minor female labor with low wage. Schools at industrial firms are divided into two types: One type is a special class, or evening class, which is established and operated by a middle or high school near an industrial firm. The other type is a school attached to industrial firm, and it is established in an industrial firm that can form two classes or more. In addition, some commercial high schools, evening classes at various types of schools, and social education facility schools accept students from industrial firms when they have difficulty recruiting students.

The provisions related to the establishment and operation of schools attached to industrial firms and special classes are presented as below:

**Article 103-4 of the Education Act: Schools Attached to Industrial Firms
(Special Classes)**

- ① High schools near industrial firms may have special classes as evening classes for the education of high school course for youths working at industrial firms.
 - ② Industrial firms as prescribed by the Presidential Decree may establish and operate high schools for the education of youths they employ.
 - ③ Matters necessary for the criteria for establishing a special class or high school as prescribed in paragraphs 1 and 2, curriculum and admissions shall be set forth by the Presidential Decree.
- For the curriculum, the curriculum of general middle and high schools shall be used mutasis

mutandis, and there is no examination for admissions.

- The employer of an industrial firm should allow youths he or she employs to enter a special class or middle/ high school if they want to and should not do any act that impedes the students' going to school or attend class.
- Also, admissions fees/tuitions, and other school fees should not be collected from these students, and the legal status of graduates from these classes or schools should not be discriminated at all compared to graduates from regular middle / high schools.

1) Schools attached to industrial firms

With the amendment of the Education Act in 1976, provisions on the "establishment of special classes and schools attached to industrial firms for the education of youths working at industrial firms" were proclaimed. Accordingly, special classes and schools attached to industrial firms began to be established. The purposes of establishing the attached schools were largely a) to instill pride as industrial workers, b) to improve production skills, and c) to resolve the inequality of educational opportunities. Business types of industrial firms that established and operated attached schools were mostly textile businesses in the manufacturing industry. Of the working students, more than 90 % were female, and in terms of age, 18 to 19 year-old students were the majority (Chun-soo Kim, 2003).

Schools attached to industrial firms could be established and operated at industrial firms with 1,000 regular workers or more. But then they should receive an approval from the Minister of Education. In many cases, they were operated in the daytime. The curriculum had middle and high school courses, and high school courses were divided into humanities and vocational courses. The curricular hours were reduced to a third of those of regular middle and high schools, but the duration of study complied with that of general middle and high schools. There were no differences in the recognition of education levels between schools attached to industrial firms and regular schools. This was to give tremendous privileges to the attached schools compared to various types of schools, including higher civic schools and higher technical schools. Though there is room for controversy

from the pure educational viewpoint, it can be said that the attached schools and classes were given special consideration from the aspect of social policy. Also, this system goes against the user pays principle, which is a general idea that the user pays the cost, but it is the innovation far removed from the conventional educational system. Preceding data show that the wages for teachers hired at the attached schools and enrolled students were paid by the businesses that founded the schools, but it is difficult to find data related to the government support.

When we examined the student recruitment process of industrial firms, the firms recruited students from middle schools even before the students graduated by setting up a sisterhood relationship or by sending senior students from the middle schools to recruit student labor on a long-term basis. When the number of applicants to the attached schools dropped, the firms lacking in technical workforce sent their teachers or staffs to middle schools and installed broadcasting equipments or offered students with terms and conditions to hire them as office workers after graduation. 87.3% of the students attending the attached schools were female, which was consistent with the high proportion of female workers in the textile and footwear industries. Because these industries preferred minor female workers with low wage, it was found that industrial firms operated their attached schools centering on female workers. In 1977, there were 7,209 enrolled students in five schools (three middle schools and two high schools), but the number of schools and students jumped about eight times and four times respectively in four years in 1980, to 27,540 students in 42 schools (19 middle schools and 23 high schools). In the 1980s, continued economic growth caused a constant increase in schools attached to industrial firms. In 1989, there were 47,860 enrolled students in 43 schools (three middle schools and 40 high schools). This is ten times and seven times more schools and students respectively compared to the numbers in early days.

Schools attached to industrial firms had continuously grown until 1988, but

then stalled from 1989 and gradually decreased in the number of students in the 1990s. Entering the 1990s, people's living standards improved, as educational opportunities expanded, industrial firms faced worsening in management. Because of these factors, special classes were reduced and schools attached to industrial firms were closed one after another. In 1989, the Hankyore newspaper pointed out that schools attached to industrial firms, which had been operated to secure mechanical workers centering on textile businesses, were shaky in their existence due to a drop in applicants and their change of jobs in large numbers after graduation. Compared to 1988, new students at schools attached to industrial firms across the nation fell by 8.8% in 1989. In particular, Seongam Girls' High School operated by Cheil Synthetic Textile Co. could not recruit new students because there were no applicants. Also, Hanil Girls' Vocational High School attached to Hanil Synthetic Fiber Co. reported that its new students decreased in number by more than 200 students. It can be interpreted that applicants for schools attached to industrial firms dropped in number because youths who could not enter regular schools fell in number as income levels improved in the recent years and because a lot of students go to higher level school after graduation from the attached schools.

In 1977, the number of attached schools and their students decreased to 20 schools (one middle school and 19 high schools) and 8,603 students. There was only one class left in middle school in Daejeon throughout the nation, and 55 classes remained in 19 high schools. They were all private schools and compared to the beginning of the schools, the number of students went down by a lot, with 12 middle school students and 7,956 high school students. In 1999, the number of schools and enrolled students plunged to 11 schools (11 high schools) and 3,331 students.

2) Special classes

Unlike schools attached to industrial firms, special classes at industrial firms were operated as evening classes in the existing middle and high schools. While costing less than attached schools, special classes were expected to have the same effect as attached schools. Special classes were established as one of the school systems implemented in 1977 based on the Decree and Enforcement Rule to Establish Special Classes, etc. for the Education of Youths Working at Industrial Firms. While schools attached to industrial firms were established and operated by enterprises with 1,000 employees or more, special classes were used by small- and medium-sized enterprises. Therefore, the policy on special classes at industrial firms targeted workers at small and medium enterprises, who were minor age group among female workers (Hee-jeong Kim, 1990). Special classes could be established by the Minister of Education at the request of collaboration or in consultation with the Minister of Trade and Industry, the Minister of Internal Affairs, and the Minister of Labor. They were supposed to be operated as evening classes for young workers at industrial firms. Part of education costs for special classes was borne by enterprises in many cases, but practically, enterprises could receive a special favor, such as exemption from tax on inherited property for education, land tax, expenses, business income tax, acquisition tax, and telephone tax.

〈Table I -6〉 The number of male and female students in special classes and schools attached to industrial firms (1990)

Unit: persons (%)

	Male	Female	Total
Special classes	14,156(20.0)	56,524(80.0)	70,680(100)
Attached schools	144(0.3)	41,949(99.7)	42,093(100)
Total	14,300(12.7)	98,473	112,773(87.3)

Source: The Ministry of Education(1990), Statistical Yearbook of Education
The Ministry of Education(1990), Current Status of Special Classes and Schools Attached to Industrial Firms to Nurture Working Youths

In sum, the government provided opportunities for vocational education for youths or young women who could not attend general schools and instead worked at factories by encouraging large companies to establish attached schools and by facilitating small- and medium-sized enterprises to install attached classes. As a result, the youths or young women who had vocational education while working in the daytime and studying at night undertook an important role in achieving Korea's economic development during the period of heavy chemical industrialization.

3) Cases

a) Hanil Girls' Vocational High School (School Attached to an Industrial Firm)

Hanil Synthetic Fiber Co. established Hanil Girls' Vocational High School at its main office in Masan region in 1974 as Korea's first school for workers. It is said that at the opening ceremony, over 4,000 students brought turf from their hometowns to make "Eight-Province Lawn" schoolyard. Hanil Girls' Vocational High School, the largest scale school attached to an industrial firm, had the following goals for establishing the school (Hanil Synthetic Fiber Two-Decade History Compilation Committee, 1986).

- Give educational opportunities to solve social problems of working girls
- Promote the return of business profit to society to create a welfare society
- Raise the pride and morale of workers in working and learning to improve productivity
- Nurture women's basic attitude toward life with diligence, self-reliance, and collaboration

According to these goals, this attached school aimed not only to solve social problems of working girls and secure workforce in a stable manner but also to improve productivity through the incentive of giving equal educational opportunities.

b) Yeonhwa Girls' High School (School Attached to an Industrial Firm)

Yeonhwa Girls' High School was operated on legal and institutional grounds in 1999. As curricular directions, the school aimed to foster democratic citizens with thorough morals and awareness of community, to develop creative abilities responding to social changes, to conduct education considering students' individuality, abilities, and career path, and to manage the quality of education. Students were divided into groups, and spent mornings or afternoons studying four hours and working on the site for eight hours with three shifts. When they were enrolled in school, they were provided with free education and textbooks for three years, free transportation, round trip, to attend graduation examination and commencement ceremony, free ride to hometown nationwide for traditional holidays, full support for middle and high school expenses up to two siblings of students who were family breadwinners and whose family was in poverty, and boarding and meals at dormitory for all who wanted to. After graduation, students would be paid with full school expenses if they went to full-year university or two-year college and had excellent academic achievements. Also, after graduation, they were employed with a priority as office workers at affiliates of the Dongbang Group. If they continued to work in production jobs, they could receive graduation allowances. If graduates went to Korea National Open University, they were fully paid with tuitions and course materials. If workers entered this school attached to industrial firms, they were paid monthly wage and bonus, and such working conditions were presented in recruitment guides (Geun-jung Yook, 1998).

C) Mokryeon Girls' High School (Special Class)

A special class attached to industrial firms, Mokryeon Girls' High School, was established by two large textile companies in Gwangju. The special class offered girls' high school courses (humanities courses) at a humanities boys' high school in general. According to the Decree and Enforcement Rule to Establish Special Classes, etc. for the Education of Youths Working at Industrial Firms, the class should be run as evening class, but Mokryeon Girls' High School operated morning and afternoon classes at the same time to meet three-shift working schedule of the companies. In 1988, the ages of Mokryeon Girls' High School students ranged from the youngest of 16 to the oldest of 23. In the same year, the length of students' service varied from 3-4 years, accounting for 55.6% of the total, to 1-2 years, 32.6%, and 5-6 years, 11.8%. Students had on-site positions, hence most of them had the position of mechanic or foreman. The special class was offered for workers who were under three-month training after entering the companies, and the number was very small. Also, only a few could have the role of foreman. The foreman was the highest position a female production worker could have among students whose length of service was at least four years (Hyeong-il Goh, 1988).

3. Evaluation and Implications

In the above, we have examined the introduction and development of women's vocational education in Korea, the current state, chronological changes, and achievements of women's vocational education. We have also looked into the character of special classes and schools attached to industrial firms, which were established as prescribed by the laws promulgated in the mid-1970s, and the achievements and benefits students gained from working and studying in special classes or attached schools.

A. Achievements and Implications in Operating Women's Vocational Education

Women's vocational education in the early stage, which had begun during the period of Japanese colonial rule, started from vocational education in such areas as agriculture and sericulture where women could quickly adapt through modernization. This was significant as the first women's vocational education in that opportunities for modern education were given to women when there was a distinction between man and woman. However, it can be inferred that after the 1940s, Japan offered vocational education to constantly develop women as major workforce to carry out the war.

Women's vocational education after the liberation of 1945 played a significant role in enhancing women's educational levels in the 1950s and 1960s. The 1950s and 1960s, when Korea was low-income country, were transitional periods from the primary industry to the secondary industry. In the 1970s, women's vocational education reached its height. This period needed a great number of workforce required for manual labor and development of light industry. The industries provided opportunities of both work and study for girls from the rural villages who wanted to come to cities, thereby motivating them to work at industrial complexes. It is undeniable that women's vocational education laid the main groundwork for achieving remarkable economic growth in a short time.

Because urbanization was in fast progress during these periods, rural villagers sent their daughters and sisters to cities and encouraged them to work and study. The income the girls earned became the main means of supporting their families. As a result, the roles of industrial complexes were undeniably important mechanisms for empowering women to work and study in the 1960s in Korea. The country then was so poor to the extent that young girls should be responsible for making the livelihood for their families.

However, in the 1970s when heavy chemical industry became Korea's growth

engine, many minor workers were no longer needed at industrial complexes. Also, because Korea took a big step forward economically in this period, parents in many families no longer asked their daughters to work and study hard at industrial complexes. Instead, they encouraged them to go to vocational high schools which guaranteed jobs upon graduation. Accordingly, a considerable number of outstanding female students went to vocational high schools and moved on to the relatively secure workplaces after graduation. Therefore, it can be said that the number of female high school graduates increased in the 1970s and 1980s as a result of women's vocational education.

Korean women's economic participation rate had been on the constant rise until the 1970s and 1980s, but then stalled in the mid-1990s. This trend was accelerated after the IMF stewardship due to the severe changes in the job levels and quantities under the transition to a knowledge-based society. As the sharp increase in the number of college-graduated women overlapped the existing jobs of high school-graduated women since 1990, there appeared a negative impact that only women's education levels were risen without bringing changes in their transition levels from schools to the labor market. Nevertheless, in order to improve women's education levels in a short time and to help women grow as competent industrial workers, it is judged that developing countries need to introduce and develop vocational education that fosters workforce rapidly adapting to phases of economic growth.

B. Achievements and Implications in Operating Special Classes at Industrial Firms

Special classes were established as one of the school system implemented in 1977 at industrial firms based on the Decree and Enforcement Rule to Establish Special Classes, etc. for the Education of Youths Working at Industrial Firms. While schools attached to industrial firms were established and operated by

businesses with 1,000 employees or more, special classes were a system small- and medium-sized businesses could use. Therefore, the policy on special classes at industrial firms targeted workers at small and medium enterprises, who were in the minor age group among female workers

The following provisions encouraged students who had completed special classes at industrial firms to continue their study in society afterwards.

"For the curriculum, the curriculum of general middle and high schools shall be used *mutatis mutandis*, and there is no examination for admissions. The employer of an industrial firm should allow youths one employs to enter a special class or middle/ high school if they want to and should not do any act that impedes the students' going to school or attend class. Also, admissions fee/tuitions, and other school fees should not be collected from these students, and the legal status of graduates from these classes or schools should not be discriminated at all compared to graduates from regular middle/high schools."

In accordance to these provisions, numerous minor workers could continue their study. After receiving a diploma, they had opportunities to go to college. As such, it can be evaluated that special schools had a bridging role in making workers to continue both their study and career. It is believed that the provisions were conceived in its early phase to promote the development of small- and medium-sized enterprises which had difficulty in finding cheap labor. In the long run, however, the enterprises and workers could reach mutual agreements because the enterprises created profits from cheap labor and simultaneously gave incentives to workers not to leave jobs during their study.

Many developing countries still have the issues of women's low education and high illiteracy. They still maintain the practice of having girls marry at an early age. Early marriage is a social practice that should be discouraged from various aspects, including women's health and economic self-reliance. In order to prevent early marriage, it would be proper to delay the time of marriage by

having girls continuously go to school. This has already been found in the case of Bangladesh. According to the cases reported to the UN, educating girls is the best way to lower the early marriage rate and thus improve women's health and prevent the spread of HIV viruses. It is also the best way to continue educating and enlightening women to do so.

In the 1950s and 1960s, early marriage was prevalent in Korea as well and there still remained the custom of young girls leaving their poor families to get married. However, since the industrialization in the 1960s, the custom of early marriage of young teenage girls naturally disappeared as they moved to cities and continued their work and study. It may be undeniable that in Korea's modernization process, young girls were exposed to considerable issues such as low wage and overwork. However, in its industrialization process, Korea implemented policies on the introduction of special classes and schools attached to industrial firms in order to promote and encourage women's education. Therefore, it is believed that Korea's experience of implementing the policy may give important implications for the education and economic development of developing countries.

II. Women's Business Start-up Policy in Korea

1. Background	39
2. Legislation, Systems, and Key Projects for Promoting Women-led Start-ups	45
3. Achievements and Implications of Women-led Start-up Activation Policies	55

1. Background

A. Changes in Environment for a Business Start-up and Women-led Start-ups

Knowledge creation, dissemination, and innovation have functioned as the core of corporate and national competitiveness in the 21st century characterized by a knowledge-based economy, with the industrial structure shifting from an input-driven to innovation-driven one. Such changes in the market environment have led policies for small- and medium-sized enterprises(SMEs hereafter) to focus on promoting innovative businesses.

With innovative SMEs have a great potential to create jobs and continuously grow to have a bigger role in a national economy, the number of women-led start-ups has incessantly grown. As of 2010, the number of women-led companies stood at 1,247,000, accounting for 37% of the total number of businesses. Over the past 20 or more years, the number of women-run enterprises has risen faster than that of men-owned companies, with the former being acknowledged as an engine of economic growth in terms of creation of employment and added value, the distribution of technological innovation, and entrepreneurship. Women's wider access to the world of business start-up can be attributed to an improvement in women's educational level, small quantity batch production, and a structural shift to service industries.

Women-led enterprises have been defined in diverse ways but they are generally recognized as those owned, run, or represented by women who are in charge of management. However, such companies are also separately defined in the rules and regulations of each nation (Jeong-hwa Kim, 2011). For instance, in the U.S., such businesses are defined as those in which one or more women have a 51% or more stake or public corporations that are run by one or more women, regarding them as SMEs owned and managed by women pursuant to Article 3 of the Small Business Act.

In Korea, women-led enterprises are deemed to be those for which a woman is registered as a representative but it is based on the premise that the woman takes part in the business management. The 1999 Act on Support for Women-owned Businesses defines women-run companies as those owned or managed by women that meet requirements stipulated in a Presidential Decree. Depending on whether a company belongs to the category of women-led enterprises pursuant to the Act, it is determined if the business is qualified to receive diverse business start-up and promotion benefits prescribed therein and in related rules and regulations. The enforcement ordinance thereof (Article 2, Paragraph 1) stipulates that women-led enterprises mean those founded in accordance with the Commercial Act, for which a woman is registered as a representative or as a business operator in accordance with the rules and regulations of the Income Tax Act or the Value-added Tax Act. However, in case there are two or more representatives, the number of shares owned by women should be more than that of stocks held by men. Companies are officially acknowledged as women-led enterprises after going through regular procedures because women-led businesses are allocated additional points when government policy support is provided. The procedures are based upon the guidelines for the identification of women-led enterprises for public agencies' purchase of products manufactured by women-led companies. The guidelines are announced by the Small and Medium Business Administration.

With women-led businesses having wider roles in a national economy in the context of employment, added-value, and technology development, a policy support scheme for promoting women-led enterprises started being organized in the late 1990s. Women-led businesses are characterized by lower debt-to-equity ratios, better business performances, friendlier relationships with employees, and less labor disputes than other SMEs. Moreover, even in the Asian financial turmoil, a smaller number of women-owned firms went into bankruptcy. The enterprises are generally deemed to be managed and operated in a solid and stable way. In economic uncertainties, many SMEs have faced bankruptcy but the share of

women-led businesses in the industry as a whole has consistently grown, signifying their growing role in cultivating a stronger and more dynamic national economy.

B. Significance and Status of Women-led Start-ups

1) Significance of Women-Led Start-ups

The reason why the activation of women's start-ups and business activities is important is related to the circumstances in which the significance of women's right to economic decision-making. Thus, their empowerment is highlighted and women's wider entry into higher-ranking positions emerges as a new matter of interest. In the past, women's interest in labor force participation was limited to working as employees, but it has expanded to functioning as employers and high-ranking managers. The significance of women as employers and their business activities has risen with the number of women-led enterprises growing in the 1990s. The reason is that women's business activities have potential to change the existing male-oriented corporate culture and management environment. Because women establish new organizations by using different human and social capital in the process of starting up a business, they create their own horizontal management system differentiated from men's hierarchical management structure. Therefore, women entrepreneurs have great potential to cultivate a gender-equal corporate culture and can offer a main impetus for nurturing female talents, maintaining a work-life balance, and establishing a new corporate culture. Based upon their distinct sociability, women can set up a new cooperative relationship between employers and employees rather than confrontations and conflicts, and thereby are highly likely to present a new management model for economic development. According to the OECD's analysis, businesswomen, who have different views and experiences from men, are able to achieve real innovation in terms of management and the use of technology. As a result, they can provide new business models and management vision.

The significance of women-led start-ups can be dealt within the context of national economic growth and job creation. First, as the share of women-led businesses in the Korean economy has ceaselessly grown, women-led start-ups have been recognized as the driving force behind the economic development. The percentage of women-owned companies in a national economy is estimated at about 30% and has continued to go up (OECD Statistics), and thus they are acknowledged as a strong impetus for job creation and innovation in the global economy. In advanced nations, the government's support for women-led start-ups and their business activities has been widely offered due to needs for fostering women-led enterprises. The Korean government has also recognized the fact that measures for promoting women-run firms should be crafted to further expand their contribution to the national economy and ensure gender equality. As a result, it has set women-led enterprises support projects as a main pillar for SMEs promotion policies since 1999, which can be deemed to be a major policy shift.

Second, in order to usher into the era of per-capita GDP of US\$30,000, under-used female talents must be fully utilized, which is emerging as a key issue. Women-led start-ups, in which the share of female workers is relatively high, can make significant contributions to creating jobs for women and also act as a channel for career-disrupted middle-aged women facing high employment barriers to re-enter labor markets. The percentage of female workers in women-led enterprises is estimated at 72.9%, 39.7% higher than that of men-owned companies. In other words, women-led start-ups have functioned as a mechanism that facilitates women's participation in the labor markets.

2) Status of Women-led Start-ups

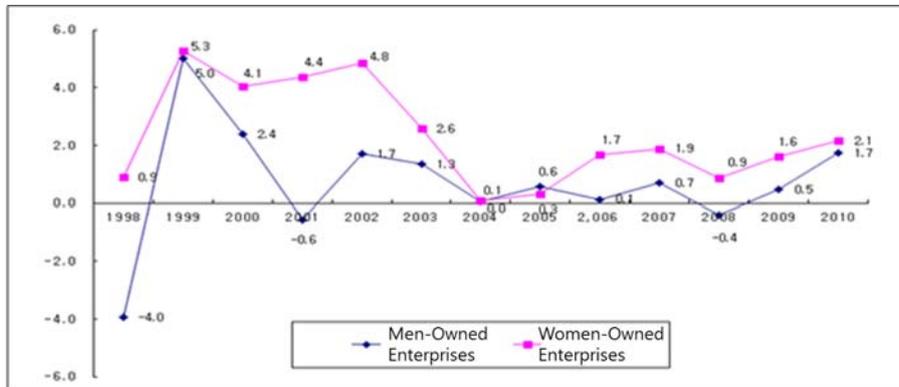
The number of women-run businesses in Korea has risen since the 1980s. It increased from 1,021,515 in 2000 to 1,247,857 in 2010. On the other hand, the number of men-owned enterprises in Korea grew from 1,991,902 in 2000 to 2,107,613 in 2010. The former rose more than the latter. As a result, the share of women-owned businesses also jumped from 33.9% in 2000 to 37.2% in 2010.

〈Table II-1〉 Growth in the number of women-led enterprises
(Unit: One Enterprise, %)

	2000	2005	2007	2009	2010
Total Number of Enterprises (A)	3,013,417	3,204,809	3,262,925	3,293,558	3,355,470
Number of Women-Owned Enterprises (B)	1,021,515	1,150,940	1,192,048	1,221,653	1,247,857
Number of Men-Owned Enterprises	1,991,902	2,053,869	2,070,877	2,071,905	2,107,613
Percentage of Women-Owned Enterprises (B/A)	33.9	35.9	36.5	37.1	37.2

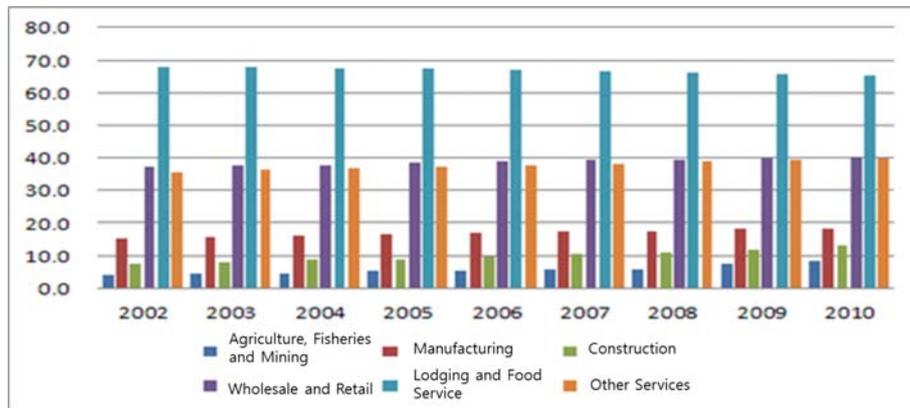
Source: The Basic Statistical Survey of Businesses, Raw Data by Year, Statistics Korea (kostat.go.kr)

As mentioned earlier, the number of women-run enterprises grew much higher than that of men-owned businesses. The number of men-led companies increased by 9.2% from 1,929,000 in 1997 to 2,107,000 in 2010 while the number of women-run enterprises surged by 35.0 from 924,000 to 1,247,000 during the same period of time. Even during the 1997 Asian financial turmoil and the recent global economic crisis, the number of women-led businesses continued to rise while the number of men-run enterprises dropped.



Source: The Basic Statistical Survey of Businesses, Raw Data by Year, Statistics Korea (kostat.go.kr)

[Figure II -1] Rate of growth in the number of women-owned and men-owned enterprises



[Figure II -2] Distribution of women-owned enterprises by business type

We can also look into the situation by business type. Women-led enterprises were concentrated in low value-added traditional realms such as lodging/food, wholesale/retail, and educational services. The percentages of women-led businesses in lodging/food, educational services, and wholesale/retail stood at 65.1%, 53.6%, and 40.1%, respectively. The shares of those enterprises in manufacturing and other services have recently grown gradually.

2. Legislation, Systems, and Key Projects for Promoting Women-led Start-ups

A. Legal Framework for Supporting Women-led Enterprises

In the 1990s, women's business activities have rapidly grown but women-owned enterprises, like SMEs, have had many disadvantages due to discriminatory practices and systems in a male-dominated and conglomerate-oriented business environment. As a result, an institutional framework was required to actively support women-led start-ups, promote gender equality in the economic sector, facilitate women's business activities, elevate the status of women entrepreneurs, and lead them to contribute to the balanced development of national economy.

The OECD's recommendation on women-run SMEs support policies can be summarized as follows: First, policies should be carried out to improve the overall effectiveness of SME policies by using information on women-led enterprises. It is important to standardize and gather statistics on SMEs including women-led businesses. Second, model cases in funding for women-run enterprises should be identified. In particular, it is necessary to have special interest in angel investors, tax systems for capital formation, guarantee programs, loans for women, microcredit programs, and finance-related training/counseling programs. Third, governments should come up with diverse combinations of public and private measures to enable women-led businesses to more easily access financial resources. Moreover, research on the value and nature of intelligent capital should be fostered to identify elements that can help to accurately assess the credit risk of financial institutions. Fourth, support for global networks among existing women entrepreneurs associations is required. Lastly, women-owned businesses should be supported to enhance their competitiveness and networking by using cutting-edge technologies (Ho-il Kim, 2000).

The Act on Support for Women-Owned Businesses was enacted in 1999. In

1994, the Act on Balanced Regional Development and Promotion of Local Small and Medium Businesses was enacted while the Small and Medium Business Administration was reborn as an independent entity in charge of SME policies in 1996. In other words, it was the period in which the importance of SME promotion was highly emphasized. The Act on Special Measures for Development of Small and Micro Enterprises was established in 1997 and the Presidential Commission on Small and Medium Businesses was set up in the following year. As well as these measures for SMEs, the economically weak, participants from 137 nations in the Summit on Microcredit held in Washington in 1997 set a goal of providing financial aid to 100 million self-employed women and small business owners by 2005. Affected by the initiative, the Act on Support for Women-Owned Businesses was legislated in Korea in 1999 (Nara Repository, National Archives of Korea, www.archivers.go.kr/nara).

According to the provisions of the Act on Support for Women-Owned Businesses, central and local governments should work hard to provide comprehensive aid to women-led businesses and ensure equal business opportunities in funding, human resources, information, technology, and markets in order to promote their business activities. Moreover, in case that public institutes implement discriminatory practices and systems against women-led enterprises, the Administrator of the Small and Medium Business Administration is able to demand that such discrimination be corrected. The key provisions thereof are summarized in <Table II- 2>.

〈Table II-2〉 Summary of the Act on Support for Women-owned Businesses

- a. The basic plan for facilitating women's business activities
The Administrator of the Small and Medium Business Administration (SMBA) shall craft and implement the basic plan for facilitating the business activities of women-led enterprises pursuant to the Presidential Decree every year.
- b. The Committee for Promoting the Business Activities of Women-led Enterprises shall be set up under the Small and Medium Business Administration to review the aforementioned basic plan and key matters for promoting the business activities of women-led enterprises.
- c. The SMBA Administrator shall conduct a survey every two years and announce the results to identify the status and activities of women-led enterprises.
- d. The SMBA Administrator shall include women-led start-up promotion plans in the SME start-up support scheme and can preferentially designate the operators of women-led start-up promotion centers in case start-up promotion center operators are appointed. Moreover, the government can provide preferential treatment to women start-up founders and start-up support-related business operators who are distinguished in terms of support for women-led start-ups in case that it offers support to start-up founders and start-up support-related business operators.
- e. Heads of public institutes shall promote the procurement of products manufactured by women-led enterprises and include such products in their procurement plans crafted pursuant to the Act on Promotion of Small and Medium Enterprises and Encouragement of Purchase of Their Products. And the SMBA Administrator can request the heads of public institutes to increase their purchase of products manufactured by women-led enterprises.
- f. The SMBA Administrator can carry out training and coaching projects for women entrepreneurs and the employees of women-led enterprises to enhance their management and technical capabilities.
- g. The Korea Institute of Design Promotion shall work hard to support women-led enterprises to more effectively develop design.
- h. The Korean Women Entrepreneurs Association shall be established in order to promote the common interests and sound development of businesswomen and to efficiently facilitate women's business activities.
- i. The Korean Women Entrepreneurs Association can set up Women Enterprise Support Centers that can provide a diversity of information, training, and counseling services in order to actively promote women-led start-ups and the business activities of women-led enterprises. The government can provide support for the installation and operation of the Centers including financial aid.
- j. Central and local governments can lend state and public properties to the Korean Women Entrepreneurs Association for free to help it effectively conduct its business. Tax benefits can also be offered to the Association.

B. Women-led Start-up Promotion Policy System²⁾

1) Central Government Ministries

a) Small and Medium Business Administration

The Small and Medium Business Administration has actually controlled women-led enterprises-related matters, requesting the correction of discriminatory practices and systems against women entrepreneurs, crafting and carrying out the basic plan for facilitating the business activities of women-led enterprises every year, and conducting a survey on the status of women-led businesses. Its projects for supporting women-led enterprises include the promotion of women-led start-ups, the cultivation of women-led enterprises, and the expansion and reorganization of infrastructure for women-led companies.

Detailed projects supporting women-led start-ups are as follows: start-up schools, start-up competitions, trainings for cultivating next-generation female CEOs, the operation of Women Enterprise Support Centers, and funding for women householders-led start-ups. More information will be offered in the following section.

On the other hand, the Balanced Growth Promotion Committee under the Small and Medium Business Administration is responsible for reviewing key matters on the promotion of the business activities of women-led enterprises and the basic plan for facilitating their business activities, which is devised pursuant to the Act on Support for Women-owned Businesses and its Enforcement Ordinance.

2) Small and Medium Business Administration Korean Women Entrepreneurs Association (2012), 「2011 White Paper on Women-Led Enterprises」, p. 91-107.



Source: Small and Medium Business Administration and Korean Women Entrepreneurs Association (2012), A White Paper on Women-led Enterprises, P. 91.

[Figure II -3] Small and Medium Business Administration's Projects Supporting Women-Led Enterprises

b) Other Ministries' Supports for Women-Led Start-Ups

The Ministry of Gender Equality and Family carries out projects for training and re-employing career-disrupted women through women centers. The Ministry of Education, Science and Technology implements start-up consultation projects for women with backgrounds in natural science or engineering. The Ministry of Knowledge and Economy enforces projects for SMEs' high-caliber R&D workforce to reinforce the capabilities of highly skilled human resources. The Korean Intellectual Property Office executes projects for the promotion of women's invention to offer markets and business opportunities to professional women

inventors. The Public Procurement Office supports the public purchase and procurement of products manufactured by women-led enterprises to lead public institutes to prioritize the purchase of items manufactured by women-led businesses.

2) Local Governments

Six metropolitan cities including Seoul and nine local governments have provided diverse aid in capital, human resources, information, and technology in order to promote women-led start-ups and to help women-led enterprises stabilize and expand their management and markets respectively. For women-led start-ups, they have carried out a variety of projects such as start-up training/funding/mentoring and aid for women-led start-up promotion centers.

Ordinances for supporting women-led enterprises have been enacted and implemented in the following local governments: Busan Metropolitan City, Incheon Metropolitan City, Ulsan Metropolitan City, Gwangju Metropolitan City, Gyeonggi Province, North Chungcheong Province, South Jeolla Province, South Gyeongsang Province, Jeju Special Self-governing Province, the City of Jeonju, the City of Gumi, and the Cities of Gwangju and Goyang in Gyeonggi Province,

3) Women-Led Enterprises-Related Organizations

Women-led enterprises-related organizations registered in Ministries such as the Small and Medium Business Administration, the Ministry of Strategy and Finance, and the Ministry of Knowledge and Economy are as follows: the Korean Women Entrepreneurs Association, the Korea Venture Business Women's Association, the 21st Century Women CEO Association, the Korea IT Business Women's Association, the Korea Women Inventors Association, and the Korea Business Women's Federation.

Specific roles of organization are as follows:

- The Korean Women Entrepreneurs Association: as an organization under the Small and Medium Business Administration, it reinforces women entrepreneurs' innovation capabilities, supporting women-led businesses to secure markets and providing financial aid to women householders-led start-ups.
- The Korea Venture Business Women's Association: as a private organization for promoting collaboration among women-led ventures, it identifies women-run ventures, supporting women to establish ventures, improving policies for activating women-led ventures, setting up networks among women-run ventures, and supporting global exchanges among women-led ventures. The project for identifying women-run ventures and helping women set up ventures is designed to connect with start-up camps, courses, on-the-spot experience, and commercialization step by step.
- The 21st Century Women CEO Association: as a private entity for facilitating cooperation among female CEOs, it promotes exchanges with globally renowned businessmen or businesswomen, making efforts to elevate and protect the status and rights of women entrepreneurs, respectively, and developing and studying top-tier management knowledge.
- The Korea IT Business Women's Association: as an organization for women-led SMEs and ventures in information and communications, it implements projects such as groupware ASP for women-led enterprises (economically weak), e-catalogue production, and the Green IT Start-up Academy for Self-Supporting Women Communities. The Green IT Start-up Academy for Self-Supporting Women Communities is designed to provide professional start-up training and on-the-spot consultation services to prospective or early-stage female start-up founders.
- The Korea Women Inventors Association: as an organization that was set up to expand the female inventor population, it actively promotes the Korean

International Women's Invention Exposition, test product manufacturing project, and Women's Invention Contests/Workshops. The test product manufacturing project is designed to financially help prospective female inventors produce test products based upon their own ideas.

The Korea Business Women's Federation works hard to promote exchanges among businesswomen and to elevate their status.

C. Key Projects for Promoting Women-led Start-Ups

1) Installation and Operation of Women-Led Start-Up Incubation Spaces

Women Enterprise Support Centers have been established in 14 regions across the nation including Seoul and other Metropolitan Cities and Provinces, offering office space to female prospective and early-stage (three years or less after a start-up is founded) start-up founders and bearing expenses for facility installation, office products procurement, and maintenance. Moreover, the Centers have helped businesswomen receive consultation services from a group of experts such as small business counselors, accountants, and lawyers, providing start-up and government projects-related information.

A total of 14 regional centers are being currently operated across the nation, with 154 out of 168 promotion rooms being occupied by start-ups. The Incheon Center has the largest number of incubation spaces totalling 19, followed by Daegu/North Gyeongsang Province and North Chungcheong Province with 16 each, South Gyeongsang Province and Gwangju/South Jeolla Province with 15 each, and Gangwon and North Jeolla Provinces with 13 each (Small and Medium Business Administration & Korean Women Entrepreneurs Association, 2012).

2) Financial Support for Women-led Start-Ups

The women-led start-up funding project has been carried out since April, 2012 in order to financially help female breadwinners establish start-up businesses, promote their business activities, and stabilize household finances. Beneficiaries are as follows: low-income female breadwinners who want to start up a business for a living; women who have fed their family for one year or longer due to bereavement, divorce, and long-term unemployment; unmarried women who have one or more dependents; and women supporting their families due to their spouses' loss of labor capacity. Households with monthly income less than KRW 2.15 million are qualified to apply for the assistance scheme. A loan of up to KRW 30 million can be provided at an annual interest rate of 3% for two years (the term can be extended only once). The Small and Medium Business Administration has operated and managed the program (Ministry of Gender Equality and Family, 2012).

In 2009, KRW 445 million were provided to 16 new applicants while KRW 767 million were allocated to 29 existing beneficiaries whose loan terms were extended. As a result, a total of 45 beneficiaries were given KRW 1.212 billion. In 2010, KRW 840 million were provided to 32 new applicants while KRW 130 million were paid to 5 existing beneficiaries whose loan terms were extended. This led to a total of 37 beneficiaries receiving a total of KRW 970 million. In 2011, KRW 455 million were delivered to 19 new applicants while KRW 170 million were provided to 6 existing beneficiaries whose loan terms were extended. This resulted in a total of 25 beneficiaries receiving a total KRW 625 million. For 13 years from 1999 to 2011, the total number of beneficiaries reached 504 (389 new applicants and 115 existing beneficiaries whose loan terms were extended). During the period, a total of KRW 11 billion worth of aid was provided to new applicants (KRW 8.5 billion) and existing beneficiaries (KRW 2.5 billion) whose loan terms were extended (Small and Medium Business Administration & Korean Women Entrepreneurs Association, 2012).

3) *Changup* (translated into 'Start-up') Net for Women

The Changup Net for Women is designed to promote women-led start-ups via training on starting up a business in promising fields based on knowledge and sensibility, and to improve women's business activities through the cultivation of one-person start-ups. Women Enterprise Support Centers are authorized to operate and manage start-up schools. The Changup Net targets female prospective start-up founders, bearing expenses for training and offering professional consultation services.

The number of training courses rose from 30 in 2009 to 48 in 2010, and to 51 in 2011, with the number of trainees also growing from 816 in 2009 to 1,249 in 2010, and to 1,302 in 2011. The percentage of those who start up a business after completing the training jumped from 17.5% in 2009 to 18.4% in 2010 and to 19.1% in 2011. Trainees' satisfaction with courses also continued to improve from 81 points in 2009 to 83 points in 2010, and to 86 points in 2011 (Small and Medium Business Administration & Korean Women Entrepreneurs Association, 2012).

4) Women-led Start-up Competition

The women-led start-up competition, a kind of start-up item contest for female prospective and early-stage (two years or less after their business start-up) start-up founders, has been held once a year in order to create a favorable environment for women-led start-ups and to early identify and cultivate female prospective start-up founders with creative ideas and high technical skills. Women Enterprise Support Centers are authorized to operate and manage the contest.

The competition project has invited participants by region. The total number of participants in the 2011 contest stood at 176, with the largest number (67) of participants coming from Seoul, followed by Gyeonggi Province with 23 contestants. The number of participants grew from 131 in 2009 to 169 in 2010

and to 176 in 2011 (up 4.1% from the year 2010). The number of awardees showed little change during the three-year period: 10 in 2009, 9 in 2010, and 9 in 2011. However, 96% of the prize winners started up businesses during the period (Small and Medium Business Administration & Korean Women Entrepreneurs Association, 2012)

3. Achievements and Implications of Women-led Start-up Activation Policies

A. Achievements

Since the late 1990s, the Korean government has carried out policies for promoting start-ups and women-led enterprises. The growing share of the service industry has also contributed to providing more opportunities for women to establish businesses. The increase in the number of women-led enterprises is estimated to have made contributions to further activating the Korean economy. The rationale for this estimation can be summarized as follows: First, over the past 10 or more years, the number of women-owned businesses has grown more than that of men-owned companies even during the economic turmoil. This signifies that women-owned firms have made bigger contributions to maintaining economic vitality than men-owned ones. Second, the growth in the number of women-owned businesses has played a significant role in facilitating the employment of women. The percentage of female workers in women-owned enterprises has been much higher than that of female employees in men-owned ones, causing the former to be a main source of jobs for women.

The growth in the number of women-led start-ups has improved women's socio-economic status. Successful businesswomen can not only act as role models for next-generation females but also help to abolish social prejudices against women's business activities.

B. Implications: Review and Limitations of Women-led Start-up Activation Policies

As mentioned in the preceding chapter, women-led start-up activation policies have played a key role in expanding the number of women-owned enterprises but have been required to be revised in accordance with the recent socio-economic changes. First, the development of the knowledge-based economy featuring product digitization, convergence technology, and information society has swiftly changed industrial structures. Second, small and medium service industries have grown fast in the fields of IT-related services, consultation, and professional design. Third, SME support policies have required businesses to shift their focus from management stabilization and external growth based upon protection and promotion to innovation-driven voluntary business activities. Fourth, conglomerates' global outsourcing, the rapid growth of LLDCs (Least among Less-developed Countries) such as China and Vietnam, and fast changes in consumer preferences have emerged as major risks.

Up to now, women have started up businesses mainly for a living, so that a basic framework is yet to be fully set up for them to grow into mid-tier companies. The average age of female start-up founders is estimated at 42, with 67% of them having a high-school diploma or lower and about half of them having been full-time housewives before starting up a business (2009 Survey of Women-Led Enterprises). Such weaknesses have led women-led companies to be concentrated into wholesale/retail and lodging/food. Women-led start-up promotion policies have shown limitations in resolving such structural problems. Therefore, more active measures should be devised and implemented, identifying models for the growth of women-led start-ups and setting a goal by sector for promoting women-led mid-tier businesses.

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