

# KIDA Brief

NO. 2021-11

*KIDA Brief* provides publicly available summaries of research projects and analysis conducted at KIDA.

## A Study for the Efficient Employment of a Civilian Workforce in Maintaining Military Facilities

LEE, Seong-Yoon

Center for Defense Resource Management

### Background and Purpose

- **The purpose of this study was to review the progress in the initiative to employ a civilian workforce in maintaining military facilities such as facilities repair, cleaning and weeding & landscaping.**
  - This study was carried out as a progress review of the initiative to employ a civilian workforce for maintaining military facilities, which was recommended by the Commission on Reforming Barracks Culture (2014) and selected then as a task for Defense Reforms 2.0 (under the heading, “expanding service support to replace the groundskeeping mission of active duty service members”).
  - This study took a comprehensive look at the contracts and practices of more than 80 military units from the past 5 years, with all of their differences (i.e. in unit contract prices, pricing standards, specific tasks for facilities repair, cleaning and weeding & landscaping), to review the progress so far.

### Research Results

- **Among others, we produced an analysis on the performance of the initiative to hire civilians for military facilities maintenance, a method of appropriately pricing the rates for weeding & landscaping contracts, and a solution to enhance the efficiency of the overall initiative.**
  - We carried out a performance analysis of employing civilians in facilities maintenance by ① tracking the change it brings to the available man-hours of active duty service members; ② surveying servicemembers for satisfaction with the initiative; ③ analyzing the “economic impact” of the initiative as a miscellaneous category of performance by way of securing evidence of its feasibility.



- If the additional active duty man-hours are committed to purposes like unit training, this initiative will contribute to enhancing combat readiness.
- We studied service members' satisfaction with the initiative in terms of “service quality” as perceived by the managers (officers & NCOs), and “project value” as perceived by the users (junior enlistees).
- We proposed adopting the forestry quotation standards by the Korea Forest Service as the pricing method for weeding & landscaping contracts.
  - The currently used construction quotation standards and the military cost breakdown of the Defense Installation Agency, which is based on the former, resulting in much higher prices than are affordable under the Ministry of National Defense budgeting standards. This has resulted in funding shortages when trying to contract civilian services for military facilities maintenance.
- We proposed a way to enhance the overall efficiency of the initiative to employ civilians in military facilities maintenance.
  - Among others, we used our survey analysis results and other previous studies to identify key problems and issues in the initiative to employ civilians in military facilities maintenance and proposed the outlines of a solution.
  - Also, we reviewed the relevant laws, norms, and government directives and proposed updating the Ministry of National Defense Directive for Managing Personnel Including Contracted Government Employees so that civilian workers can be directly hired from the local talent pool for military facilities maintenance.



We carried out this study by way of reviewing the progress of the initiative to employ civilian workers in the maintenance of military facilities. This initiative was first recommended by the Commission on Reforming Barracks Culture (2014). It was then selected and expanded as one of the tasks of Defense Reforms 2.0. Over the past five years, civilians have been contracted and employed in more than 80 military units, in each case with specifications that followed from the characteristics of the unit. In this study, we took a comprehensive look at all of those instances, accounting for each



of the variations (i.e. contract rates, pricing standards, specific tasks in facilities repair, cleaning and weeding & landscaping), to review the progress of the initiative overall.

The points of focus in this study were the performance analysis on civilian employment, appropriate pricing standards for weeding & landscaping services, and enhancing the efficiency of the overall initiative. The details are as follows.

First, we carried out a performance analysis of civilian employment by primarily looking at associated changes to available man-hours and servicemember satisfaction. We surveyed active duty service members and analyzed the results to project the changes to their available hours that will be brought about as a result of employing civilians to handle military facilities maintenance. We believe that by committing the additional man-hours that are made available to purposes such as unit training, employing civilians can help enhance the military's combat readiness. Our study indicates that employing civilians for facilities maintenance, army divisions, and equivalent units can free up a total of 1.899 million man-hours a year from active duty service members. If we count 60 minutes as the meaningful unit of time that can be used for training and other activities, the Army will gain an additional 11.7 days (at division levels if employing civilians for facilities repair, cleaning and weeding & landscaping); the Navy will gain an additional 4.6 days (at fleet command levels if employing civilians for cleaning only), and the Air Force will gain an additional 13.0 days (at wing levels if employing civilians for cleaning and weeding & landscaping).

We studied servicemember satisfaction with employing civilians in two parts. First, we studied it in terms of "service quality" as perceived by the managers (officers & NCOs). Second, we studied it in terms of "project value" as perceived by the users (junior enlistees). When surveyed for "service quality," the managers (officers & NCOs) responded that the level



of performance (or satisfaction) for each task given to a civilian was low relative to the level of its importance. This was true across all task categories, which were narrowly ranked from highest to the lowest level of satisfaction with very marginal differences in the order of weeding & landscaping, facilities repair, and cleaning. We also conducted an importance-performance analysis, which indicated that the initiative to employ civilians had room for improvement, i.e. in terms of expanding equipment support and having contractors play a more proactive role.

When surveyed for “project value,” the users (junior enlistees) responded that employing civilians generally helped with the servicemembers in their military service. The greatest amount of satisfaction came from the additional time that was freed up from having civilians to work on facilities maintenance. That said, there was also a considerable number of respondents who felt they did not receive substantial benefits from the civilian employment initiative. Junior enlistees ranked the task categories from those they were most satisfied with to the least in the order of facilities repair, weeding & landscaping, and cleaning.

The survey also asked managers (officers & NCOs) and users (junior enlistees) in which direction they thought the initiative to employ civilians in facilities maintenance could be improved. There were responses common to both groups, i.e. that task scope should be expanded, additional workers should be hired, etc. At the same time, some responses were distinct to each of the groups. Managers believed that there was room for improvement in terms of equipment support, the introduction of a system for performance management, and requests for a budget increase. On the other hand, users (junior enlistees) believed that there was room for improvement in terms of the work ethic and poor performance outcomes of civilian workers.

We also analyzed the initiative’s “economic impact” as a miscellaneous category of performance by way of securing evidence of its feasibility. We



found that the budget for the new initiative was more or less at the same level as the manpower cost of using active duty service members for facilities maintenance.

Second, we proposed adopting the forestry quotation standards by the Korea Forest Service (KFS) as the more appropriate way of pricing the contract rates for weeding and landscaping services. The current pricing method follows the quotation standards for construction work and its derivative military projects cost breakdown by the Defense Installation Agency (KIA). The resulting rates are much higher than what would be available under the market and exceed the standard budget of the Ministry of National Defense. Consequently, there have been cases in which there was a funding shortage for contracting civilian workers. The most important factor in setting the rate for weeding and landscaping services is the direct cost of wages. In the current standard for quotation, this is 182 KRW / m<sup>2</sup>. If the KFS standard is adopted, it could be as low as 58~83 KRW / m<sup>2</sup>, which is just 32~46% of the current rate. Adopting the forestry quotation standards will require one adjustment in that the military will have to count the additional cost of direct wages for the general labor required to collect and discard grass, which is not counted in KFS weeding operations. Differences across military units should be accounted for by referring to the price adjustment factors in the forestry quotation standards (i.e. steepness of the ground, extent of collectivization). The more specialized military zones will require separate standards, i.e. tractor use zones, firebreak zones, and island installations.

We noted that there are not as many contracts for landscaping services as there are for weeding. Each landscaping contract also differed from each other in its content, pricing method (i.e. the DIA cost breakdown vs. price of aggregate quotation information, which is the one of aggregate price books; surface area vs. amount of vegetation), types of vegetation involved, tasks required (i.e. whether or not the arbor needs to be trimmed to fit landscaping



design). We cannot propose a flat rate for all landscaping services due to such a variety of means. Nevertheless, there still needs to be some set of standards. Mainly, we proposed pricing the services involving trees according to the number of individual trees, while pricing the services for shrubbery and grass according to the ground's surface area (m<sup>2</sup>). Differences across services and military units should also be accounted for by referring to various cost adjustment factors (i.e. steepness of ground, presence of obstacles). Although the past contracts for tree maintenance services suggested that a flat workload of 3~5 trees were required per person a day, we found that in practice, there were significant differences in the actual workload across military units depending on the specific tasks required (i.e. whether or not the trees had to be trimmed as part of landscaping).

Third, we took a number of steps in this study to identify the key problems and issues associated with the initiative to employ civilians in maintaining military facilities and to generate ideas for enhancing the efficiency of the initiative. Mainly, we ① called for feedback from working level officers that dealt with the initiative either in each of the service headquarters or the military unit concerned; ② conducted a variety of survey analyses, including an importance-performance analysis; and ③ reviewed previous studies on the topic.

The key problems and issues included ① unionization and other collective action by civilians who are contracted employees; ② excessive administrative work incurred by directly hiring facilities repair and cleaning workers (i.e. as required in setting their wages or managing their attendance); ③ limited options for hiring resident experts (i.e. for maintaining facility equipment) at front-line and remote-area posts. We offered an outline of how these issues can be tackled.

We also reviewed the laws, norms, and government directives that are relevant to the initiative. Most of the coverage on employing civilians in



maintaining military facilities was found in the last of these three, so our review was mainly focused on government directives. We proposed updating the Ministry of National Defense Directive for Managing Personnel Including Contracted Government Employees so that it can supply the grounds for directly hiring a workforce for maintaining facility equipment or cleaning work from each military unit's local talent pool.

Given the results of this study and the stated intent of the '21~'25 Mid-term Defense Plan to continue expanding the use of civilians for cleaning and weeding tasks, it seems the current initiative will have to be continually expanded. Study results, including our survey of servicemember satisfaction, indicate that a greater priority needs to be placed on employing civilians for weeding, landscaping, and facilities repair rather than for cleaning tasks. We would simply add that an effort will also have to be made to address key issues of practice along with institutional improvements including an update to the MND directive to allow direct hiring of civilians from each military unit's local talent pool.

We hope that this review of the progress in the initiative to employ a civilian workforce in maintaining military facilities can contribute to laying the groundwork for the continued expansion and keeping the momentum of the initiative, and enhance its efficiency.

*\* The views expressed in this paper are those of the participants (LEE, Seong-Yoon, KIM, Jin-Ho, JEONG, Sang-Hwa (intern)) of the research project "A Study for the Efficient Employment of a Civilian Workforce in Maintaining Military Facilities" conducted at KIDA in 2020, and do not represent or reflect the official position of Korea Institute for Defense Analyses.*