

Transformation of civil servant management towards sustainable rice value chain and resilience of rural development in Indonesia

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Abstract. The government of Indonesia reaffirmed its commitment to boosting national agricultural production in anticipation of the potential food crisis that is currently plaguing many countries worldwide. Rice production became self-sufficient in 1984 as a result of controlled population expansion. Food security and farmer welfare are two of Indonesia's Vision 2045's main objectives. The multi-stakeholder approach is intrinsically linked to these objectives, and civil servants (ASNs) play a critical role as transformers. This article examines the idea of changing civil services to promote the reorganisation of the country's rice system and putting sustainable practices into the production, handling, distribution, and consumption of rice, as well as the control of food loss and waste. This study employed qualitative approaches through desk research and a thorough review. This research yielded an all-encompassing concept of public servant management transformation through requirements and planning analysis, competency development, career trajectory analysis, talent management, performance evaluation, and welfare provision. Enhancing nutrition, achieving food security, ending hunger, and promoting sustainable agriculture are the 2030 Sustainable Development Goals (SDGs), and strengthening Indonesia to accomplish these targets may require transforming bureaucracy.

1 Introduction

Indonesia has emerged as a leader in mainstreaming the Sustainable Development Goals (SDGs) following the publication of Presidential Regulation Number 59 of 2017 regarding the implementation of SDGs. SDGs become an essential element for the development plan, Indonesia Vision 2045, which was just created. The Government of Indonesia (GOI) seeks to hasten the accomplishment of the nation's objectives as outlined in the Preamble to the 1945 Constitution by 2045, when the country will have been independent for 100 years. Without holding back, Indonesia is predicted to develop into a developed country with an average income of IDR 27 million and ranks among the Big Five economies with a poverty rate of almost zero. It has a 48.2% greater share of the economy outside of Java [1].

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However, the actual situation differs from the GOI pledges at the global and national levels. There has been little shift during the past six years (stagnation). Indonesia is still rated 97th out of 165 nations included in the 2021 assessment according to the SDGs index scoring, which compiles the success of the 17 SDGs targets, with a score of 66.34. The status of Indonesia is even behind that of China, Vietnam, and other ASEAN nations [2].

When it comes to implementation progress, none of the 17 goals fell into the green category as a sign of achievement of the SDGs' goals. Table 1 reveals the nine goals remaining in the red group (severe problems): hunger, water and sanitation, infrastructure, health, inequality, sustainable cities, life on land, in the water, and below the water. The five goals that have come to a stop are life on land, life below water, climate action, sustainable cities and communities, and partnership for the goals. The GOI has much work to do if it wants to speed up the implementation of the SDGs, which will not be completed for another ten years.

Table 1. SDGs implementation in Indonesia, 2021.

SDGs target	Implementation		Description
1. No deprivation	↗	green	Achieve
2. No hungry	↗	yellow	Problems remain
3. Excellent health and welfare	↗	orange	Problems challenges
4. Excellent education	↑	red	Major problems
5. Gender parity	↗		
6. Sanitation and clean water	↑	↑	On track or maintaining achievement
7. Economical & ecological energy	↗	↗	Moderately Increasing
8. Fair labor & economic development	↑	⇒	Stagnating
9. Infrastructure, industry, and innovation	↗	↓	Decreasing
10. Diminish inequalities			
11. Ecological towns and cities	⇒		
12. Conscientious production & consumption			
13. Climate act	⇒		
14. Submerged life	⇒		
15. The land life	⇒		
16. Justice, peace, and robust institutions	↗		
17. Cooperations to achieve the SDGs goals	⇒		

The state apparatus plays a crucial role in an effective and responsive government. Governments must navigate a fast-changing environment in terms of technology, the economy, society, and politics while also dealing with a growing number of complicated policy concerns. Modern civil service organisations require a competent, committed, and mission-driven workforce to adapt to various challenges and circumstances. Civil servants are primary government tools for enhancing public service provision [3].

In order to enhance government performance, policy reforms must consider the structure and administration of the civil service workforce. To effectively address complex issues, utilize new technologies to enhance citizen-state interaction, support diverse and vulnerable

populations, and improve the legitimacy and transparency of government processes, careful consideration of hiring, training, and management practices in the civil service is essential [4].

From this perspective, one of the most important factors in achieving this lofty goal is the calibration of the civil service (*aparatur sipil negara*/ASN). The problem lies in the inadequately high calibre of human resources (HR), which are the lifeblood of the bureaucratic apparatus. Indonesia's 2019 ranking on the government effectiveness index is 60.1, which is significantly lower than its ASEAN neighbours, such as Singapore, which ranks 100 for indicators and government effectiveness. Some are global indicators [5].

Indonesia serves as a helpful example. Since the Reformasi era, which has led to the adoption of democratic institutions and ideals, Indonesia's public sector has faced several challenges and substantial internal changes. The achievements and shortcomings of the Indonesian government over the last 20 years have been greatly influenced by its civil servants, from the severe effects of the Asian financial crisis to the extensive decentralisation reforms that overthrew the bureaucracy's centralised structure to the present COVID-19 pandemic-related public health issues. Understanding the reasons for the failure of the Indonesian civil service and the subsequent changes is essential for developing future modern, accountable, and transparent governance [6].

An extensive, data-driven analysis of the state of the Indonesian civil service is given in this report. This illustrates the challenges faced by the Indonesian bureaucracy is currently confronting by employing statistics on the number and composition of civil services, public service delivery, and public opinion. Even though there has been progress, more work must be done to improve Indonesian civil servants' foundational knowledge and abilities and lessen the vast regional differences in the number and quality of civil servants across the Indonesian archipelago to promote resilient rural development and sustainable agriculture.

2 Methodology

This study utilized an exploratory qualitative descriptive methodology through library research. Research that aims to find new information on facts, events, or symptom groupings is called an exploratory study. The descriptive study completed the data analysis provided by the system, making it easier to understand and draw conclusions. Determine and condense the information gathered from stakeholder interviews in the agricultural industry for the study's framework. Exploratory descriptive research seeks to define the characteristics of a particular phenomenon. This study only identified variables, symptoms, or circumstances, rather than attempting to test any specific hypotheses [7].

3 Results and discussion

3.1 Civil service overview of the agricultural sector

As of 2023, over 4.2 million active public servants (ASN) were employed in Indonesia's civil service. As of June 2023, the total number of ASNs was 4,282,429, comprising 3,759,302 civil servants (PNS) and 487,127 government employees with work agreements (PPPK). Approximately 1.58% of the workforce is employed in the civil service, which is similar in size to the bureaucracies in other countries in the region. This workforce costs the state about 25% of its total budget. Civil personnel are employed by over 600 different national, regional, and local government institutions, including 32 national ministries, as well as numerous other agencies, bureaus, and organisations [8].

There are 17 ASN functional jobs in the agricultural sector, as listed below: (1) agricultural extension officer, (2) control of plant pest organisms, (3) plant seed supervisors, (4) veterinary medicine officers, (5) paramedic veterinarians, (6) livestock breeding supervisors, (7) feed quality supervisors, (8) results quality monitor, (9) agricultural products market analyst, (10) food security analyst, (11) plant variety protection checker, (12) plant genetics analyst, (13) plant quarantine checker, (14) quarantine vet, (15) animal quarantine paramedic, (16) agricultural equipment and machinery supervisor, and (17) agricultural infrastructure and facilities analyst. Table 2 provides the number of civil servants (PNS) according to specific functional positions supervised by the Ministry of Agriculture in 2019. The central government recruited government employees with work agreements (PPPK) from 2019 to 2023 for 12,012 agricultural extension officers [9,10].

Table 2. Indonesian civil service officer for the agricultural sector, 2019.

Functional/professional position	Amount (people)
Veterinary medicine officer	929
Paramedic veterinarian	1,158
Plant seed supervisor	1,088
Livestock breeding supervisor	340
Agricultural product quality supervisor	330
Feed quality supervisor	206
Control of plant pest organisms	3,415
Agricultural extension officer	21,353
Agricultural product market analyst	157
Food security analyst	72

Bureaucratic reform needs to be put into place to achieve Indonesia’s vision of being advanced, just, sovereign, and prosperous by 2045. Bureaucracy plays a crucial role in national development because it functions as a public service implementer, policy actor, supervisor, and strategist, and bureaucracy is the main pillar of national development. Nonetheless, there is still a severe deficiency in the distribution of technical functional roles that support national goals, such as agriculture and outstanding regional potential, as shown in Fig. 1. For instance, only 1.45% of ASNs in Maluku and Papua have a background in agriculture [11].

In addition to basic criteria, such as educational attainment, the Indonesian public service uses several measures to assess performance. In particular, the National Civil Service Agency (BKN) has developed a new index of professionalism for ASN (IP). This index thoroughly assesses the professionalism of a civil service unit using four criteria: performance, competence, qualification, and discipline. A civil servant's level of education accounts for 25% of their final score, and additional training workshops must be completed successfully to demonstrate competence. Annual performance reviews account for 30% of the score, and records of disciplinary infractions account for 5% of the score. Final grades were classified as very low (60), low (61–70), moderate (71–80), high (81–90), or very high (91–100). This index is based on a realistic set of input metrics that match the industry standards for civil services.

The Professionalism Index revealed an intriguing pattern. The IP scores for several civil service organisations are listed in Table 3. The BKN classification indicates that all government units are low in terms of professionalism; central government units had an average score of 68.5 out of 100, while regional government units received a score of 62.7. As the centres of the agricultural and rural development sectors, the Ministry of Agriculture and the Ministry of Rural are both rated poorly for the calibre of civil service performance

[12]. Several civil servant management issues include poor performance and competence, educational background and skill incompatibility with regional needs and leading sectors, welfare disparities, constrained regional fiscal space, and a lack of technical staff (specialists), teachers, and health professionals.

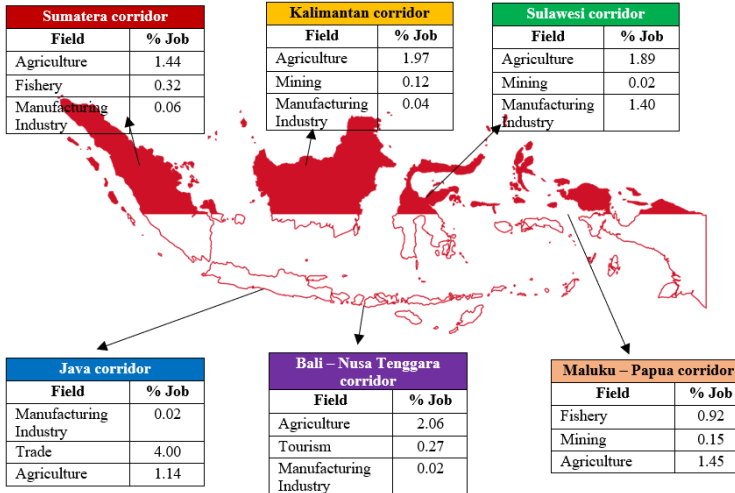


Fig. 1. Percentage of technical positions in the agriculture sector.

When considering educational attainment and IP scores to gauge the competence and skills of Indonesia's civil service, there is a general space for improvement. All branches of government in Indonesia are not satisfied with the general level of competence in civil service. The discrepancy between the divisions of the central and regional governments, as well as the geographical dispersion of provincial and district administrations, is particularly noticeable in Indonesia. Furthermore, it is uncertain whether current hiring practices and on-the-job training programs are set up to provide the abilities needed to fulfil future requirements for Indonesia's civil service [13].

Table 3. Indonesian civil service performance, 2018.

Agency	Dimension				IP score	Category
	Qualification	Competence	Performance	Discipline		
Central agencies	14.70	24.00	24.80	5.00	68.50	Low
Ministries	14.20	23.20	24.30	5.00	66.70	Low
- Ministry of Agriculture	13.00	26.00	22.00	5.00	66.00	Low
- Ministry of Rural	15.00	20.00	25.00	5.00	65.00	Low
Institutions	15.10	24.70	25.40	5.00	72.50	Moderate
Regional agencies	13.40	20.70	23.50	5.00	62.70	Low
Provincial governments	14.20	21.70	24.20	5.00	65.10	Low
District governments	12.70	19.80	22.90	5.00	60.30	Low
Overall Indonesia	14.10	22.40	24.20	5.00	65.90	Low

3.2 Transforming civil service management in the agricultural sector

Article 2 of Government Regulation No. 11 of 2017, covering the management of public servant, lists 14 components of civil servant management, including needs assessment and preparation, career patterns, competency development, talent management, performance management, and welfare. These factors still seem inflexible, and Indonesia's regional heterogeneity conditions have not yet been considered. As in metropolitan areas, the incredibly different characteristics of Indonesian territory require civil servant management approaches that do not apply to all. Given the plethora of issues, constraints, and obstacles encountered in these locations, affirmative action policies pertaining to civil servant management are imperative to expedite development milestones, especially in Indonesia. Therefore, civil personnel administration must be altered in the following areas to comply with Law No. 5 of 2014 concerning Civil Servants.

3.2.1 Needs assessment

Several methods should be developed to address the issues faced by agricultural officers. There are currently almost 40 thousand civil servants working as agricultural extension workers. Meanwhile, the number of villages throughout the country is currently 71,479. Therefore, there is still a lack of agricultural extension workers. Similarly, both national and local governments in the agricultural sector require more policy analysts. Policy analysts must be able to provide solutions to assist the government in resolving societal issues. Since setting policy essentially involves selecting one option from a range of alternatives, not only does public policy solve problems, but it also creates new ones.

State apparatus recruitment in the outer and distant areas (3T) needs to be opened up to involve local communities in selecting ASN candidates. Currently, civil servant candidates are recruited only using the computerised assistant test (CAT) method. Since local residents are the ones most familiar with the characteristics, challenges, issues, and constraints of the 3T region, they should be included in the process. Allocating 20–30% of formations to local communities in the 3T region is one way to implement this recruitment approach [14,15].

3.2.2 Career path

Career development for civil servants in other sectors must be kept apart from that for agricultural servants in rural areas. Locals may be appointed to key positions in civil service in rural areas, or civil servants who began their careers may have had a shorter career advancement period. In rural and isolated places, there is potential for a government employee to rise to the position of the top leader in the area. Naturally, this depends on employees' aptitudes or skills. Following the successful completion of work in the 3T categories, this can be done as a tour of duty that gives public servants the added benefit of accelerating their career advancement.

3.2.3 Promoting learning and development (L&D)

There are significant disparities in talent and competency among civil officers in different parts of the country. Less than 1% of pass registrants were awarded educational scholarships by civil officials, the Ministry of National Development Planning (BAPPENAS), and the Indonesia Endowment Fund for Education (Lembaga Penjamin Dana Pendidikan, LPDP) (Fig. 2). These institutions provide a plethora of chances to develop competencies through educational scholarships [16,17].

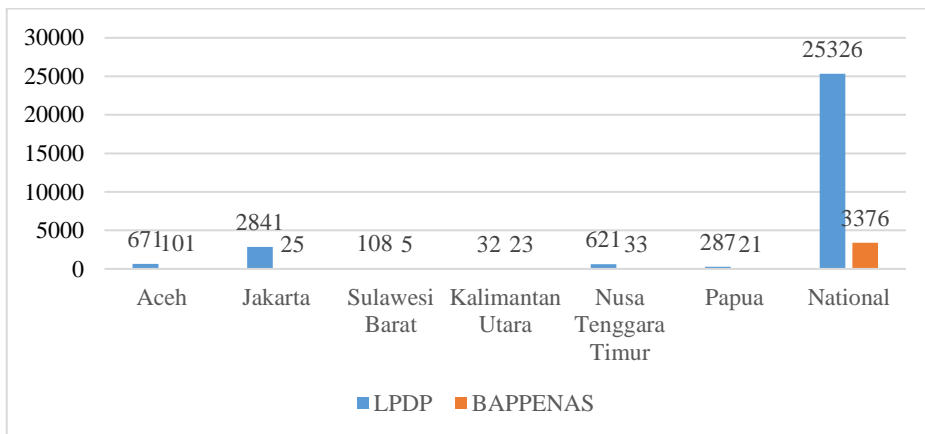


Fig. 2. LPDP and BAPPENAS scholarship in Indonesia for civil servants, 2020.

This condition contributes to the poor quality of public services and development in rural areas, as well as the low competency of local government personnel. Enrolling a greater percentage of regional civil servants in L&D programs, whether degree- or non-degree-granting, is the best way to carry out affirmative policy initiatives by providing privileges for competency development to civil servants in regions. This is especially true for the 3T regions. It is also important to make training more accessible.

The Regulation of the National Institute of Public Administration (Lembaga Administrasi Negara/LAN) No. 10 of 2018 concerning the Development of Civil Servant Competencies also stipulates that civil servants must earn 20 lesson hours (JP) for competency development. These hours should be evenly distributed among all professions that support the integrated realisation of each goal.

3.2.4 Enhancing talent management

The complexity and high level of challenge in the agriculture and rural areas sectors make it necessary for government employees to possess superior competencies to address development challenges and issues. Hence, improving a person's grade level in other areas is one way to provide exceptional talent with a motivating factor to realise their potential. Civil servants stationed in the most troublesome locations are outstanding talents expected to solve agricultural issues and achieve zero hunger and sustainable agriculture for the SDGs.

It is essential to develop management of talent and establishment of bureaucratic cadres. Due to limited resource availability, a national talent list (talent pool) can be used to fill qualified human resources positions inside an organisation, particularly in local governments. For instance, the top civil servant from the Ministry of Agriculture can serve as the Head of the Agricultural Service in border regions such as the Talaud Islands District, North Sulawesi, since they have demonstrated competence and performance in the area of agricultural development. In addition to promoting regional development, his presence is anticipated to yield the greatest number of bureaucrats in the following years.

Engagement in the 3T domains should be an essential requirement for prospective leaders within the bureaucratic sphere. The perception of engagement within the 3T domains has been regarded as a repository for undesirable tasks, necessitating a transformative shift. The process of rebranding is imperative to cultivate a favourable impression regarding the endeavour of working within the 3T domains.

3.2.5 Driving innovation

In an endeavour to enhance the calibre of public employees in the agriculture sector and rural development and address the issues pertaining to the management of their performance, which are primarily caused by the lack of specialised individuals (i.e., public employees with distinguished expertise) and the growing demand for a bureaucracy that is based on functionality in Indonesia in accordance with the directives given by President Jokowi, it becomes imperative to stimulate public employees who hold the status of implementation to assume functional positions more professionally and possess specific skills. By doing so, the government’s performance will be enhanced, and the quality of public services to achieve sustainable agriculture will be improved. In addition, promoting civil servants to functional roles can further enhance the efficiency and effectiveness of bureaucratic structures. This is achieved by adopting agile and non-hierarchical patterns while also breaking down silos within the system. Consequently, it leads to the establishment of a bureaucratic culture that is both swift and efficient. An additional benefit of this approach is the potential increase in income for civil servants as they receive job allowances and ascend to higher positions, as depicted in Fig. 3 [18].

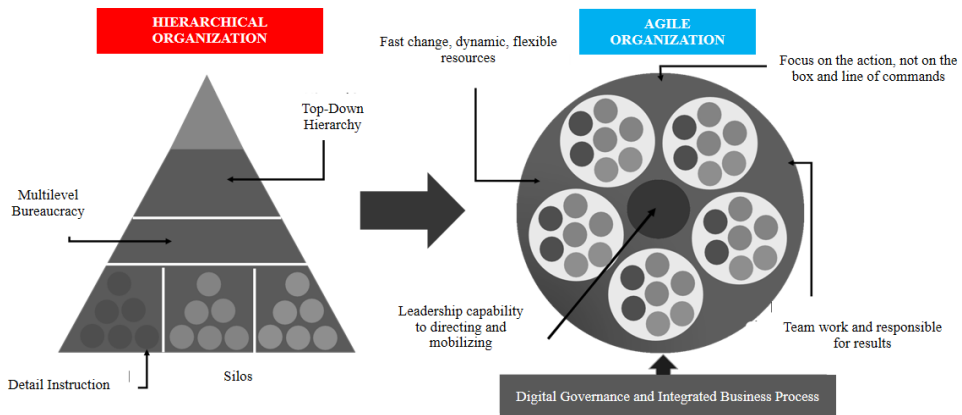


Fig. 3. Towards an agile civil service organisation in the agriculture sector.

To establish a responsive and flexible organisation that can effectively address ever-changing environmental conditions and intricate societal requirements, it is imperative to foster innovation not only among managerial personnel, but also among functional authorities, manifested in the shape of innovative endeavours known as change projects. As demonstrated by an employee at the Food Security Agency, the organisation has undertaken a project to expedite registration services for fresh food of plant origin, specifically focusing on rice commodity businesses. This project is an endeavour to enhance the efficiency and effectiveness of the registration process. Enhancing the capability of the apparatus in the analysis and prediction of food prices through the utilisation of the Autoregressive Integrated Moving Average (ARIMA) model, also performed by the Food Distribution and Reserve Center [19].

3.2.6 Civil servant welfare

Consideration of financial well-being is an essential aspect that cannot be disregarded by government employees. The enhancement of government employees’ well-being, especially those who work in the agriculture sector, rural areas, and specifically in remote regions, acts as a powerful incentive for them to seek fulfilment in these areas. As a result, it is imperative

to differentiate the type of welfare from that in urban areas due to the distinct challenges and significant topographical limitations. To adequately incentivise government employees in 3T regions, it is necessary to provide incentives that align with the regional cost index established by the BPS. Either way, this can be achieved by multiplying the basic monthly salary by the regional cost index, giving a monthly allowance equal to one time the basic salary, or computing it by multiplying the monthly basic salary by the regional cost index.

4 Conclusions and policy recommendations

By restructuring civil servant management within the agricultural and rural development sectors, specifically focusing on the six dimensions, it is anticipated that there will be expedited attainment of development objectives and realisation of the SDGs and Indonesian Vision 2045. Through the utilisation of needs analysis, cultivation of competencies, examination of career trajectories, management of talent, appraisal of performance, and provision of welfare, this study generated a comprehensive concept and policy recommendation regarding the transformation of public servant management in the agriculture sector. Reforming the bureaucratic system could be a major factor in helping Indonesia maintain its standing and effectively carry out the national priority agenda, which includes ending hunger, achieving food security, improving nutrition, and advancing sustainable agriculture.

Enhanced civil service practices possess the potential to engender improved formulated and administered policies. Better civil service practices can improve frontline service delivery. The improved management of civil services can lead to improved outcomes for citizens. To achieve the SDGs, we must ensure that civil service rights can be obtained.

Acknowledgement. We would like to express our gratitude to Erna Irawati from the National Institute of Public Administration Republic of Indonesia (LAN), who has been our major supporter in participating in and presenting our research at the 2nd International Conference on Agriculture, Natural Resources, and Rural Development (ICANARD), Bogor, 18 October 2023. All authors contributed significantly to the methods, intellectual content of the review, and composition and revision of the manuscript. All authors have read and approved the final manuscript.

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