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Korean Agricultural ODA and Its Economic Impacts: System, Performance, and Some Issues

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This paper deals with: Korean ODA architecture, current features, review of literature, and issues for consideration. Many ministries are involved in Korean ODA, resulting in segmentation of ODA players, although between 2010 and 2019, the Korean ODA budget increased 2.5 times. A wide-range review of Korean literature which studied the relations between ODA and its economic impacts shows that most research focuses upon economic impacts on the macro-level Korean economy. Academic interests should identify the contributions of agricultural ODA to agricultural development of recipient countries. A case is chosen to show economic impacts of an RPC project in the Philippines.

Key words: Korean ODA, economic impact, agricultural development cooperation

1. Introduction

With diverse global, regional, and national efforts, it is shown that the proportion of poor people has been decreasing, although there exist regional differentiations. Despite expanding development aid, it can be demonstrated that there are still more than 800 million people who are extremely poor and food insecure (FAO, 2018). For better performances, emphasis was moved from aid effectiveness to development effectiveness after the 4th High Level Forum for Aid Effectiveness in Busan in 2011 (Lim, 2011).

One of the most crucial goals of development cooperation is the improvement of livelihood of the people in developing areas. Development effectiveness is closely linked with impacts and sustainability of aid projects. In that agricultural sector development is critical in overall development, the importance of securing positive social or economic impacts of agricultural development projects cannot be overemphasized.

Korea has rapidly expanded its financial commitments to international development cooperation since around the period of its entry to the OECD/DAC in 2010, and agricultural ODA as well. A recent trend in Korea shows self-reflection that development effectiveness or sustainability of positive social and economic impacts needs to be considered more seriously in designing and implementing development cooperation projects. Crucial issues include debates surrounding ODA architecture, inefficiencies from duplication and lack of linkages among ODA organizations, and unsystematic project management.

Meanwhile, studies on the relationships between aid and economic growth of partner countries are abundant. Their major concern would be categorized based on: ODA in general vs. ODA in specific sectors, and economic impacts upon donor country(ies) vs. recipient country(ies). It will be worthwhile to pay more attention to the relationships between agricultural sector ODA and its impacts on recipient countries, because, as the World Bank (2007) indicated, agricultural growth is at least two times more effective in reducing the poverty of developing countries than any other sector.

This paper tries to touch upon these issues by dealing with the following four parts: Korean ODA architecture, current features of Korean ODA including the agricultural sector, a review of the literature on the relationship between ODA and its economic impacts, and issues for further consideration.

2. Korean ODA Architecture

The legal framework of Korean ODA is based on the Framework Act on International Development Cooperation ('Framework Act') and the Presidential Decree which came into force in July 2010. Since 2010, Mid-term Strategy for Development Cooperation has been set out twice to cover the periods of 2011-2015 and 2016-2020, providing strategic directions, principles, ODA targets and allocation

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guidelines for achieving the goals of development cooperation described in law (www.odakorea.go.kr).

The highest decision-making body for Korean ODA is the Committee for International Development Cooperation (CIDC), chaired by the Prime Minister. Besides finally approving ODA projects every year, both grants and concessional loans, it deliberates all development cooperation policies of Korea, including the Five Year International Development Cooperation Strategy. The Working Committee usually discusses the agenda in advance of the CIDC meeting (see Figure 1).

Many governmental ministries play the roles of donor organizations under the leadership of Prime Minister's Office (PMO). Agencies such as Korea EximBank and Korea International Cooperation Agency (KOICA) are key institutions for performing ODA activities while many other public organizations are also involved. Korea EximBank is the sole agency monopolizing concessional loans and multilateral aid to multilateral development banks (MDBs). For grant aid, KOICA and forty-one other public organizations plan to provide aid as implementing agencies, as of early 2019 (Korean Government, 2019).

With respect to the agricultural sector, between 2007 and 2016, seventeen ministries and public organizations have engaged in agricultural ODA. They include the Ministry of Food, Agriculture, and Rural Affairs (MAFRA), Rural Development Administration, and Korea Forest Service, as well as KOICA and Korea EximBank (Heo *et al.*, 2019).

Due to the large number of implementing agencies, there have been sustained debates surrounding the issue of diversification and fragmentation of ODA players (for example, Park, 2011; Kim and Kim, 2009). The Ministry of Strategy and Finance (MOSF), Ministry of Foreign Affairs (MOFA), and PMO, as the supervising ministries of ODA, have introduced rules and measures for coordination which are expected to reduce unnecessary overlapping and inefficiencies while increasing linkages among proposed projects. The guideline recently distributed by MOFA (2019, Guideline for 2020 Grant Project Action Plan) enforces procedures which every ODA project needs to take in order to get approval for budget. Below are a few mechanisms of coordination.

1) Discussion meetings of organizations concerned for grant

These region- or sector-based meetings are participated in by ministries, local governments, and other public organizations involved in project proposals. They deliberate every grant proposal and coordinate at the practical level, based on the criteria whether they coincide with Sustainable Development Goals (SDGs), state foreign policies, Country Partnership Strategy (CPS), etc.

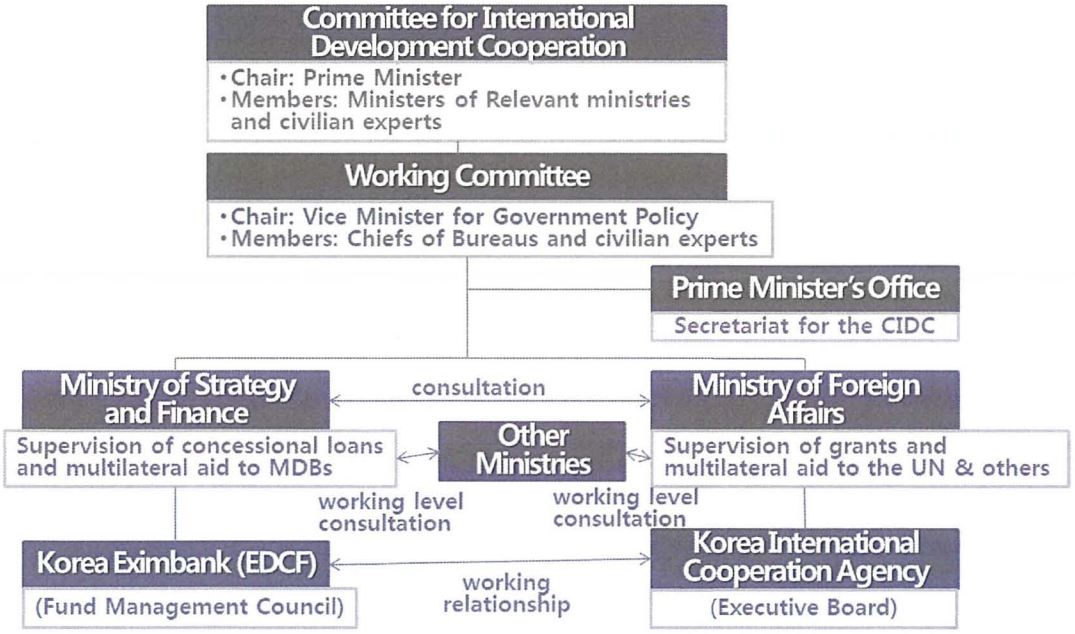

Figure 1. Korean ODA architecture
Source: http://www.odakorea.go.kr (accessed Oct. 14, 2019)

2) Opinion reference to embassy

After receiving proposals, MOFA sends them to the embassies in partner countries to inquire opinions about their necessity and priority. This process is to confirm whether secretaries or officials residing in the partner country have been approached by, and have discussed with, the project initiators and are well aware of the project.

3) Review of proposals by experts

Proposals are reviewed by non-governmental experts and professionals by sectors. Experts present review opinions about their policy coherence, environment for project implementation, appropriateness of plan, and sustainability. Review results are fed back to the project designers for revision, if necessary.

Usually, during the coordination process, MOFA also checks whether the proposals are supported by required documents. Required documents include the project concept paper (PCP), which describes the project (beneficiaries, short- and long-term objectives, indicators for result management, related governmental policies and so on, besides basic information), (pre-)feasibility study report (required only for program, project and consulting types of aid), and project request letter officially signed by the managing agency of the partner country—for example, the Ministry of Planning.

The purpose is to check and coordinate the cases of proposals in which different projects concentrate on the same sites or try to mobilize similar means of aid. Those projects overlapping with other donor institutions abroad are also filtered out. Seen from the 2019 plan by the Korean Government (2019: p.14), sixty-one cases or 128 proposals have been ordered to 'link' or 'coordinate' to increase effectiveness, and another 23 proposals were disapproved due to overlapping.

Despite those measures for ameliorating inefficiencies stemming from diversification and segmentation, Korean ODA architecture is still faced with some problems. It is not specified how the projects will be 'linked' as a result of coordination because there is not any formalized and clear-cut protocol or guidelines for linkage, as of now.

MOFA and KOICA have tried hard to consolidate grant implementing agencies to KOICA but failed so far, due to the unwillingness of other ministries and public agencies. The latter groups raise issues of sector expertise and specialty as their strong points in performing ODA projects; meanwhile KOICA argues for the importance of professionalism in conforming to the rules and protocols in the fields of international development cooperation.

MAFRA operates an internal deliberative body, the Committee on Global Cooperation in Agriculture and Forestry, to coordinate ODA projects being performed by public authorities concerned in agricultural and forestry sectors. Unlike CIDC, however, the Committee is a place to share information about what each organization plans to do rather than working as a coordinating and decision-making body.

3. Agricultural ODA in Korea

The Second Mid-term Strategy for International Development Cooperation covering 2016 to 2020 has declared that it will support the following three principles: integration, reinforcement, and participation. Twenty-four developing countries were selected as prioritized so that partnership strategy for each country would be established and about 75% of ODA budget should be assigned to these countries (Korean Government, 2015).

For the past ten years, Korean ODA size has increased substantially. The total ODA budget in 2019 is 3.2 trillion KRW while it was 1.3 trillion KRW in 2010. There is 5% increase in the 2019 budget compared to the 2018 budget (Korea Government, 2019: p.21). Among them, 78% is bilateral ODA and the remaining 22% is multilateral ODA. Within bilateral ODA, grant aid occupies 54% and concessional loans account for 46 %. The Korean government has the target to expand multilateral aid to 25%, and grant aid to 60%.

In 2019, the Ministry of Foreign Affairs through KOICA and the Ministry of Strategy and Finance through EDCF will execute about 67% of the annual bi- and multi-lateral ODA budget while other governmental agencies implement the remaining 33% except for contributions and concessional fund to international finance institutes.

Geographically, Asian countries receive 39% of total bilateral ODA, compared to Africa 22%, and Latin America and the Caribbean 8%. About the share of Africa, critical review has been raised that it should be bigger than the current level (OECD, 2012: p.50).

The amount of agricultural ODA (agriculture, forestry and fisheries) in 2019 is 221 billion KRW, which is about 8.9% of total bilateral ODA and 9.8% of bilateral grant aid.

Aid related with hunger eradication, represented by contributions to the SDG #2, takes about ten percent in

numbers, and fourteen percent in budget, following those areas of education, industry, governance, water development, and public health (Korean Government, 2019: p.9; see Figure 2).

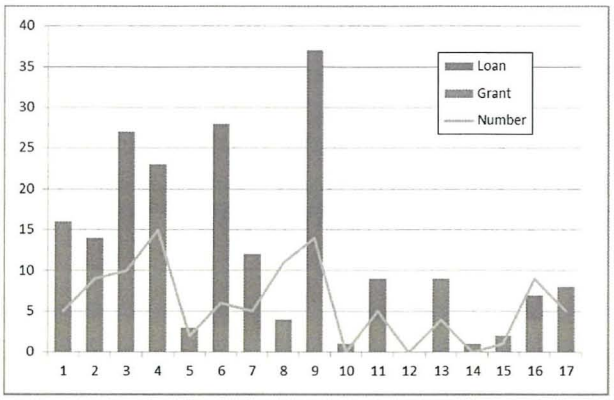

Figure 2. Percentage of budget and number of projects by SDGs

Note: SDGs 1: no poverty; 2: zero hunger; 3: good health and well-being; 4: quality education; 5: gender equality; 6: clean water and sanitation; 7: affordable and clean energy; 8: decent work and economic growth; 9: industry, innovation and infrastructure; 10: reduced inequalities; 11: sustainable cities and communities; 12: responsible consumption and production; 13: climate action; 14: life below water; 15: life on land; 16: strong peace and justice institutions; 17: partnerships for the goals.

Source: Korean Government (2019: p.9).

The feature of budget distribution, within the agricultural sector, can be described based on the Creditor Reporting System (CRS) code assigned to each project. For the period 2007 and 2016, agricultural development (31120) takes the largest share of budget, followed by rural development (43040), agricultural water resources (31140), livestock (31163), and agricultural education/training (31181) (Heo *et al.*, 2019).

The Korean government has declared that it will expand the ODA budget to reach 0.20% of GNI by 2020, but, judging from the fact that it was 0.16% in 2016 and 0.14% in 2017, the target will not be attained (Korean Government, 2015, 2019).

4. Economic Impacts of Korean Agricultural ODA

This part is to introduce research trends in Korea surrounding the relationships between ODA and its economic impacts. Literature are classified: literature on ODA and its impact on the Korean economy, and literature on ODA and its impact on developing countries' economy.

1) Literature on ODA and the Korean economy

Studies on the economic impacts of ODA are crowded among topics related with quantitative measurement of the performances of ODA in general for Korean economic spheres, not paying much attention to the agricultural ODA and recipient countries.

Lee (2014) analyzed and identified benefits acquired by Korea from its foreign assistance during the periods of 1986 and 2009, in particular the impacts on the Korean economy in general through export expansion using a gravity model. The reports divided the impacts into direct and indirect ones and made comparisons between grants and concessional loans. It argued that, adding up direct and indirect impacts, loans had contributed a 5.3 U.S. dollar increase in export per one dollar loan to the recipient countries, whereas there were not significant associations between grants and export increase.

Similarly, Jeong and Choi (2015) have argued for spill-over effects of Korean ODA on such factors as domestic consumption, export and investment as well as GDP and employment, whereas KAIDEC's (2017) concern is on creation of employment opportunities for youth in Korea through ODA. Yoon and Kim (2017) are those who also look into the associations between Korean aid and the internal economy, such as exports and employment within Korea.

2) Literature on ODA and developing countries

Jeong's (2016) work on the effectiveness of Korean ODA is one of the studies which empirically analyzed the impacts on the economic growth of the recipient countries. The regression analysis of economic growth rates against ODA amount provided during 1992 and 2014 for 58 recipient countries showed very significant positive impacts since 2011.

An empirical study by Suh (2011) tried to measure the extent to which Korean ODA had contributed to the economic growth of three Asian countries, Indonesia, Vietnam and the Philippines.

Some of the literature goes further to distinguish the effects by type of aid, by comparing the effects of grant and loan aid on recipient countries. Ma *et al.* (2015) have tried to analyze the economic effectiveness of grant aid. With time series analysis on the effects on Vietnam and Tanzania, and panel analysis for 42 partner countries, they concluded that the grants have had a positive and significant positive effect on GDP growth rate, while in some cases diminishing

return to aid was found.

Jeong and Kim's (2018) argument favors loans in terms of their impact on GDP growth and human capital over grants. Although grants and loans both have positive effects on GDP growth, loans have much larger effects on total factor productivity (TFP), and the accumulation of human capital.

The above works all adopt economic growth, represented by growth rate, as the most appropriate index of the impact on developing countries. In that indicators of economic growth such as GDP growth rate do not necessarily imply aid effectiveness, however, the works have limitations in fully understanding the impacts on the improvement of the livelihoods of the people in developing countries.

This is exactly what Hwang *et al.* (2016) have found in their empirical study on aid effectiveness. Their study intended to identify the determinants of economic growth and individual welfare represented as the human development index (HDI). According to the research on forty African countries during the periods of 2005 and 2012, ODA affected positively the economic growth, but the same was not true for the HDI.

3) Literature on sector ODA and developing countries

Economic impacts of specific sector ODA have not been a popular theme in Korea, with possible exceptions made by Kim (2008), which focused upon infrastructural ODA, and Kim and Jang (2012), which analyzed ICT sector aid's impacts upon African countries. Literature which analyzed the impacts of agricultural ODA upon the recipient countries is not available at the moment in Korea.

4) Economic impact evaluation through project evaluation

At the micro-level, the economic impacts from ODA can be partly figured through project evaluation, because most of the projects in Korea are usually assessed by applying OECD/DAC's five principles: relevance, effectiveness, efficiency, impact and sustainability. The result framework has been recognized as a useful tool for systematically tracking a project's performances for the short-, medium- to long-term period.

A project's outputs are initial results from combinations of activities and inputs, occurring in most cases in the short-term period and affecting a limited number of (direct) beneficiaries and areas which the project has covered. Project outcomes are aggregated changes for the medium- to long-term period which can be identified among more people and within broader spaces, that is, local areas within a country's territory or even the country as a whole. Impacts of a project are more related with the level of strategies which donors or ODA policy decision-makers have in mind as final objectives. Below, Figure 3 shows an example of the result chain framework of a (hypothetical) technology development project.

When we say 'economic impact' of a project, it is mostly related with any changes in earnings, tangible and intangible assets, including values to be realized without doubt in the near future. As it would be possible in many cases to measure the incomes or values quantitatively, it looks an easy task to learn the economic impacts of a project. But it is not the case. The neglect of a baseline survey makes it implausible to measure the amount and degree of changes after the project. Data and statistics are in many cases hard to obtain even from the beneficiaries and stakeholders. Sophisticated methodologies are not applicable for various reasons.

Project evaluation is critical in measuring mid-term impacts, suggesting the adoption of any follow-up measures and finding out lessons for other upcoming cooperation activities. Since 2014 All agencies have enforced the undertaking of evaluations, although not toward all projects. Besides the evaluation of each project selected, Korea has introduced the evaluation of cooperation with a specific partner country, sector evaluation, and thematic evaluation as well. All evaluation reports are open to the public through an internet site (www.odakorea.go.kr).

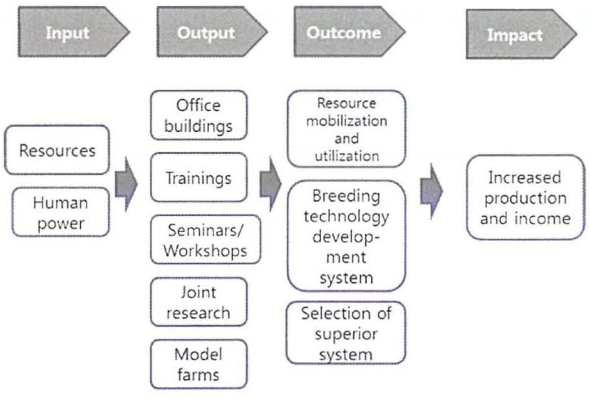

Figure 3. Example of result chain framework

Source: Author's own work.

To measure the economic impacts by ODA project on beneficiaries is notoriously either difficult or unfeasible for

various reasons. Methodologies for impact assessment have been introduced, but there is a long way to go for application. Result-based project management and baseline surveys have started to be undertaken only recently in Korea, which makes unlikely the precise understanding of economic impacts of the agricultural ODA projects.

Below, this paper tries to describe a case which evaluated impacts of an agricultural ODA project in Korea using econometric methodology. Korea International Cooperation Agency (KOICA) initiated a 13 million USD project in four provinces of the Philippines to support building rice processing complexes (RPCs) from 2009 to 2013 (see Figure 4 for locations). Three years after the project finished, a third-party research center implemented evaluation to identify project outcomes and impacts.

5) A case of economic impact: RPC in the Philippines

The evaluation team's overall conclusion was that they found reduced loss and enhanced quality of rice at the postharvest stage thanks to the RPCs, partly contributing to the increase of farmers' income and welfare. However, the possibility of longer-term, sustainable operation and management of the facilities by the local people was dubious (CIDC, 2016).

Figure 4. Locations of RPCs in the Philippines

Source: Author's own work.

The project provided a rice milling system with a milling capacity of 2.5 ton per hour or 5,600 ton per year, and a drying machine with 10 ton per hour for each RPC. The economic benefits from the facilities were derived in three aspects: rate of rice loss, quality of rice represented by the rate of crushed rice, and cost reduction due to efficiency in distribution. The rate of rice loss fell from 15% to 10%, the emergence rate of crushed rice from 40-50% to 10%, and distribution and marketing processes became more efficient because of diminished stages of distribution from four to three: grower — collector or 'palay assembler' — processor — seller, to grower — processor — seller, skipping the collector.

Assuming 30 years' duration for facilities and 10 years for equipment, it was estimated that there would be a 7.4% economic rate of return, in the case that the RPCs operated at their full capacity. However, with the operation rate at the time of evaluation of 25%, it only produced a negative 13.3% rate of return, meaning no feasibility to invest. The operation rates of the drying machines were lower: 11-13% (see Table 1).

The low operation rates were due to the lack of supply of raw material, paddy, and high cost for fuel to dry the paddies. RPC, after being handed over to the local government, did not have enough funds to purchase paddy by themselves. Kerosene was too expensive fuel; therefore they had to change the system to use biomass instead.

Unlike milling and drying facilities, storage facilities operated at excessive capacity, implying the difficulties of timely release of milled rice for sale, thus causing financial problems.

Table 1. Changes in ERR by rice production

Operation rate	100%	75%	50%	25%
Yearly production of milled rice*	5,600 ton	4,200 ton	2,800 ton	1,400 ton
Economic rate of return (ERR)	7.4%	2.5%	-3.5%	-13.3%

Note: * Assuming that the facilities last for 30 years and equipment for 10 years.

Source: CIDC (2016).

As 96.7% of the total project budget had been assigned to the construction of the facilities and the purchase of equipment, capacity building for sound management and business operations were far from enough. Furthermore, many practical level officers who got training and education through this project were found to leave the positions

afterwards. The evaluation team diagnosed that the recipient partner should have found solutions to secure business-minded experts as well as mechanics to maintain the facilities.

Lower operation rates and less production of processed rice than expectation have resulted in meager impacts on local or national level income increase in the rice sector. In spite of that, it is also true that the project provided quite good benefits to those who participated in the rice supply chain. The RPCs made special contracts with farmers to purchase paddy, or palay, for processing at a higher price than market, which was estimated to be beneficial to farmers, as much as 9 to 10 million pesos each year (50 pesos is equivalent to about 1 US dollar).

5. Summary and Conclusion

This part tries to extract key issues surrounding Korean agricultural ODA, including the economic impacts.

Diversification and overlapping of cooperation projects by various public organizations have been one of the hotly debated issues for the past more than ten years in Korea. The Korean government has introduced some procedures to ameliorate the issues, for example, to give favor or preference in the budget screening process if the proposals include ideas of linkages between different ministries, although those kinds of effort are unable to effectively manage the issue.

Korean ODA budget size is expanding faster than in any other OECD/DAC country, but it is still far below the level which international society has suggested. Regional assignment of budget is skewed to Asian countries, leaving Africa's share smaller than a quarter in proportion (22% in 2019). Agricultural ODA is slightly less than 10% of the total budget, and, when considering the critical importance of the agriculture and rural development of developing countries, the share needs to be increased.

Literature on the ODA and its economic impacts are reviewed to check current trends in Korea. Most of the studies are focused upon the economic impacts upon the Korean economy, such as exports and employment, and a smaller number of studies has dealt with the impact of the recipient countries' economy. Economic growth, represented by GDP per capita, for example, has been the most popular variable in the studies of the latter kind.

Studies on the impacts of the agricultural ODA in general are non-existent for now. Academic emphasis should be given to the topic to identify the contributions of the agricultural ODA to the development of the agricultural sector and economy as a whole of the recipient countries.

This paper selected an ODA project as a case to show its economic impacts: i.e., performances of RPC operations and benefits enjoyed by farmers who traded with the facilities in the Philippines by reviewing an ex post evaluation report.

Usually, monitoring or evaluation reports apply five principles of OECD/DAC when checking current process or performance of a project. For assessing the outcomes and/or impacts in a result framework after the conclusion of the project, it is not easy to find reports using any econometric methodologies for now even at the project level. It may be because systematic data accumulation through, for example, a baseline survey, was not implemented for monitoring and evaluation purposes from the start of the project.

This paper has dealt with economic impacts of ODA in the field of agriculture; however, development of underdeveloped countries is not be attained only by the economic benefits from such assistance. As the seventeen sustainable development goals (SDGs) indicate, social, cultural, political, environmental, and other non-economic aspects are also critical in resolving underdevelopment and facing challenges. Discussions about the economic impacts of ODA should be further linked with those issues at the global, regional, national, and local levels.

References

Food and Agriculture Organization (FAO) (2018) *The State of Food Security and Nutrition in the World*, FAO.

Heo, J., H. Seok, W. Cha, Y. Lee, and D. Jeong (2019) *Nongrimeup Bunya Joongjeom Hyupryukkukbyul Kukje Gaebal Hyupryuk Jeonryak Soorip* (*International Development Cooperation Strategy in Agriculture and Forestry Sector for Focus Countries*), Korea Rural Economic Institute.

Hwang, J., H. Park, S. Lee, and H. Lim (2016) Gongjeok Gaebal Wonjoeui Wonjo Hyogwaseonggwa Hankuk ODAe Daehan Sisajeom (An Empirical Study on the Aid Effectiveness of Official Development Assistance and Its Implications to Korea), *Journal of the Korean Regional Development Association* 28: 5.

Jeong, H. and H. Kim (2018) A Comparative Analysis of Development Effectiveness of ODA Grants and ODA Loans, *Journal of Korean National Economy* 36: 1.

Jeong, I. and D. Choi (2015) *Woorinara ODA Saeopeui Kuknae Pageup Hyogwa Pyeongga Younkoo* (*A Study on Domestic*

Ripple Effect of Korean ODA), International Employment Development Institute.

Jeong, T. (2016) Woorinara Gongjeok Gaebal Wonjoeui Hyogwaseonge Gwanhan Yunkoo (Effectiveness of Korean Official Development Assistance), *International Business Review* 20: 4.

Kim, E. and J. Kim (2009) *Hankook Wonjo Chegyeeui Boonjeoli Wonjo Hyugwaseonge Michineun Yeonghyang Mit Gaeseon Bangan* (*Korean ODA's Fragmentation: Its Implications on Aid Effectiveness and Strategies for Improvement*), Korea International Cooperation Agency.

Kim, J. (2008) Gongjeok Gaebal Wonjoeui Hyogwae Gwanhan Yunkoo Donghyang (Research Trend of ODA Effectiveness), *Monthly Report of Korea Maritime Institute* Vol.288.

Kim, S. and J. Jang (2012) ICT Boonyae Daehan ODAga Africa Gyeongje Seongjange Michineun Hyogwa (Analysis of ICT ODA on African Economic Growth), *Journal of the Korean Association of African Studies* Vol.37.

Korean Association of International Development and Cooperation (KAIDEC) (2017) *Gongjeok Gaebal Wonjoreul Tonghan Jisok Ganeunghan Iljari Changchool Bangan* (*Sustainable Job Creation through ODA*), Korean Association of International Development and Cooperation.

Korean Government (2015) *Je 2cha Gukje Gaebal Hyupryuk Joonggi Gyehyok* (*The Second Mid-term Strategy for Development Cooperation*), Republic of Korea.

Korean Government (2019) *2019 Nyun Kukje Gaebal Hyupryuk Jonghap Sihaeng Gyehoek* (*Annual Integrated Implementation Plan for International Development Cooperation 2019*), Republic of Korea.

Kyunghee Daehakkyo Kukje Gaebal Hyupryuk Yunkoo Center (CIDC) (2016) *Philippine 4gaejoo Migok Jonghap Cheorijang Geonlip Saeop Sahoo Pyeongga Bogoseo* (*An Ex Post Evaluation Report of RPC Establishment in the Four Provinces of the Philippines*, Korea International Cooperation Agency.

Lee, J. (2014) ODAeui Gongyeoguk Gyeongje Giyeo Hyogwa Boonseok: Hankook Sarye (An Analysis of Economic Contribution Effects of ODA on Donor Country: Case of Korea), *Korea Eximbank Overseas Economic Research Institute Report*.

Lim, S. (2011) Busan Chonghoeeui Gyulgwawa KOICA Gaebal Hyupryup Saeope Daehan Hameui (The Results of Busan HLF and their Implications on KOICA Development Cooperation Projects), *International Development Cooperation* Vol.4.

Ma, J., S. Yoon, S. Hong, and S. Hwang (2015) *Moosang Wonjoeui Gyeongjeseong Hyogwa Boonseok* (*An Analysis on Economic Effectiveness of Grant*), Korea International Cooperation Agency.

OECD (2012) *Korea Development Assistance Committee (DAC) Peer Review 2012*, OECD.

Park, M. (2011) *Hankook Moosang ODAeui Partnership Jego Bangan Yunkoo* (*A Study on Enhancement of Partnership of Korean Grant ODA: Establishment of Cooperation System among Government and Public Organizations*), Korea International Cooperation Agency.

Suh, W. T. (2011) Gongjeok Gaebal Wonjoga Gyeongje Seongjange Michin Hyogwaseonge Gwanhan Siljeung Yunkoowa Geu Sisajeom (An Empirical Study of Effects of ODA on Economic Growth and Implications), *International Development and Cooperation Review* 4: 1.

World Bank (2007) *Agriculture in Development*, World Bank.

Yoon, Y. and H. Kim (2017) *KOICA Moosang Wonjoeui Gooknae Soochool Mit Goyonge Michineun Yeonghyange Gwanhan Yunkoo* (*A Study on Impacts of Grant Aid by KOICA on Domestic Exports and Employment*), Korea International Cooperation Agency.