KINGDOM OF CAMBODIA

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COMPLETION REPORT

"REVIEW OF PUBLIC INVESTMENT IN AGRICULTURE SECTOR IN CAMBODIA"

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PREPARED BY

THE ANALYTIC UNIT FOR AGRICULTURE SECTOR (AUAS) of THE SUPREME NATIONAL ECONOMIC COUNCIL (SNEC)

COLLABORATED WITH AND SUPPORTED BY
THE AGRICULTURE SERVICES PROGRAMME FOR INNOVATION, RESILIENCE AND EXTENSION PROGRAMME (ASPIRE)

IFAD
Investing in rural people

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LIST OF ABBREVIATION

ADB	Asian Development Bank
AFD	Agence Française de Développement
CCC	Cambodia Chamber of Commerce
CDC	Council for Development of Cambodia
CDRI	Cambodia Development Resource Institute
CSES	Cambodia Socio-Economic Survey
EU	Delegation of European Union to Cambodia
Euro-Cham	European Chamber of Commerce in Cambodia
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FWUG	Farmer Water User Groups
GDP	Gross Domestic Products
IFAD	International Fund for Agricultural Development
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MOC	Ministry of Commerce
MORAW	Ministry of Water Resources and Meteorology
NBC	National Bank of Cambodia
NSDP	National Strategic Development Plan
OECD	Organization for Economic Cooperation and Development
R&D	Research and Development
RGC	Royal Government of Cambodia
RS-IV	Rectangular Strategy-Phase IV
SNEC	Supreme National Economic Council
TFP	Total Factor Productivity
UNDP	United Nations Development Programme,
USAID	United States Agency for International Development
USD	United States Dollar
USDA	United States Department of Agriculture
WB	World Bank
WDI	World Development Indicator

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EXECUTIVE SUMMARY

Cambodia has made remarkable socio-economic achievements through its rapid economic growth of an average rate of 7.7% per annum over the last two decades; thanks to the government's efforts in maintaining peace, political stability, and sound macroeconomic and fiscal management. Agriculture has been among major economic pillars supporting this rapid growth and regarded as a priority sector, which has contributed to growth, poverty reduction (contributing 60% to poverty reduction from 50% in 2007 to 21% in 2011, and around 44.7% from 19.8% in 2012 to roughly 9.4% in 2017[1]), job creation of over 3 million employments per annum which was equivalent to between 36% and 40% of the total active labor force, and food security - reflected through self-sufficiency of paddy rice production and surplus for export between 4 million tons and 5 million tons per annum.

Concerning its role vis-à-vis economic growth, approximately 1.4% to the average economic growth rate of 6.5% per annum during 2004-2013 has been attributed to agriculture. Despite this progress, the growth of the agriculture sector has been decelerating. This sector experienced an average growth rate of 1.8% during 2011-2017, down from 5.8% per annum during 2004-2010. Its share to gross domestic products (GDP) dropped from 34.6% in 2011 to around 23.6% in 2017, and its contribution to growth declined from 0.8% to 0.3% in the corresponding period. Such a declining growth has been possibly driven by the external and non-controllable factors such as the negative effect of climate change and the drop of agriculture commodities' prices.

In addition to these factors, the puzzle among policymakers, development partners, and other relevant stakeholders has been while the public spending or known as the public investment has increasingly injected into this sector, its growth trend has been declining. Specifically, during 2011-2017, the Royal Government of Cambodia (RGC) has increased its public spending (excluding wage) up to 1.52 folds, which has been estimated in an aggregated term to be USD 272.6 million per annum (35% was financed by government budget and 65% financed by development partners' budget including loans and grants)--- approximately 1.6% of gross domestic product (GDP) where MAFF's and MOWRAW's public spending accounted for 0.43% and 1.17% of GDP, respectively. Out of this spending basket, crops as a subsector - absorbing up to 74.8% of

[1] The World Bank's Report "Cambodia's Agriculture in Transition: Risk and Opportunities in 2015" and the Estimate from the data calibrated from Cambodia Socio-Economic Survey (CSES)

the total spending basket while the share of average public spending on fishery and livestock has been small—around 3.7% and 2%, respectively, while the irrigation accounts for approximately 60% compared to that of only 5.8% to agriculture extension services, and 0.7% to research and development (R&D).

Though inconclusive to suggest whether Cambodia overspent or underspent on the agriculture sector given its stage of development and economic structure, the analysis from research has, however, yielded important points. Those findings include: (1) the level of spending on this sector - around 1.6% to GDP was not low compared to that of the selected countries in the region; (2) it is also found out the public spending was allocated mostly to hard infrastructure, particularly large scale irrigation scheme (its share accounting for approximately 60% of total spending basket) compared to soft infrastructure such as agriculture extension services, and R&D (its share only accounting for around 5% and 1% respectively); (3) thanks to the largest share of public spending concentrating on irrigation scheme which has supported mainly the rice sector, the paddy rice production has significantly increased over the last decade, and the living conditions of farmers whose farmland closed to irrigation scheme have improved, though some challenges remain; and (5) the growth of agriculture productivity has slowed with respect to land, labor, and total factor productivity even though the public spending on this sector has increased.

Alongside some positive effects from public spending, the efficiency of increasing spending on the agriculture sector remains a key challenge and has significant room for further improvement. The spending has been heavily concentrated in irrigation schemes—mostly large scales financed by several development partners' concessional loans and grants. While the increased investment in irrigation over the last decade has been strategic and instrumental to the growth of a specific commodity, predominately rice, it may have not been well-balanced and sufficiently diverse. These efforts have not been comprehensively harmonized and inter-connected. The RGC needs to consider to re-prioritize and rationalize the irrigation schemes vis-à-vis the spending on other economic compositions such as R&D, extension and other non-irrigation infrastructure, which have yet to receive a sufficient share of the total spending. Such consideration shall also be fully studied and linked to key and potential commodities more than just the rice sector. It is imperative the government takes into account the support provided to other economic compositions and other sub-sectors (other commodities) because these aspects are essential to support the agriculture development in the medium and long term.

Based on above findings and to accelerate the growth of this sector in medium and long terms and increase the efficiency of the public spending, some key strategic directions regarding to the public spending on agriculture that the RGC shall consider are as follows:

(1) **Increasing and rationalizing public spending on agriculture to encourage and facilitate the agriculture productivity, commercialization and diversification:** The key prioritized areas include: (a) gradually shifting to small scale irrigation schemes which connect to the medium and large scale schemes with the capacity development of farmers water user groups to manage and operate the scheme in a sustainable manner since irrigation schemes remain instrumental to the growth of the agriculture sector; (b) focusing on and encouraging investment in post-harvest facilities such as cooling room for vegetable, fruits, fish and meat, drying facilities, agriculture product distribution centers at the district levels, and packaging and cleaning equipment; (c) promoting and supporting R&D in good quality seeds of crops (fragrant rice, cashew, cassava, mango, red corn, rubber and other major fruits which are potential for export), fish, chicken, and pig. R &D needs to be market demand-driven and be co-financed by government's budget, development partners' fund and other contributions; (d) focusing on the supply of good quality seeds and other important agricultural inputs so that farmers could have access the good quality and affordable inputs to boost the production yields; and (e) facilitating demand-driven extension services by strengthening the capacity and providing appropriate incentives to extension agents on the ground.

(2) **Enhancing the institutional coordination and harmonization at the planning and budgeting and implementation level.** To achieve this, the Ministry of Agriculture, Forestry, and Fishery (MAFF) needs to finalize the formulation and put into implementation the Agriculture Master Plan 2030, which serves as the main umbrella to harmonize and coordinate all projects and programs related to agriculture sector development.

(3) **Promoting the institutional capacity and gradual decentralization of resources.** It can be done in part by developing the technical capacity of government officials under both MAFF and MOWRAM in the aspects of large-scale project design and formulation, monitoring, and evaluation. To ensure the effective implementation of agriculture projects, it is vital the RGC speeds up the decentralization of human resources, financial resources, and some parts of authorities to provincial and district levels through appropriate incentive mechanisms.

(4) Improving the agribusiness environment: through (a) promoting sound agriculture business environment by improving trade facilitation which is related to law enforcement of economic land concession scheme, business registration, inspection, quality certification, enhancing fair playing field among local and foreign investors, accelerating the enforcement of contract farming between private companies and farmers or agriculture cooperatives so that they could ensure the stability of raw material supply; (b) considering to establish the Special Economic Zone or SME Cluster for Agro Processing based on the potential of respective regions; (c) further reducing the cost of doing business by cutting the cost energy, improving the quality of infrastructure and connectivity, reducing logistics cost, and promoting affordable access to finance, especially for smallholder farmers; (d) establishing the agriculture loan programs which all farmers, small and medium agribusinesses could access the loan with the concessional rate; and (e) coordinating agribusinesses to participate in agriculture global value chains through building up technical capacity, business matching platform, and agribusiness exhibitions.

1. INTRODUCTION

Cambodia has made remarkable socio-economic achievements through its rapid economic growth of an average rate of 7.7% per annum over the last two decades; thanks to the government's efforts in maintaining peace, political stability, and sound macroeconomic and fiscal management. This has built up the confidence and paved the way for domestic and foreign investors to inject capital and do business in the kingdom. This growth has been driven by key sectors, such as garment, construction, tourism, non-garment manufacturing, agriculture, and other emerging sectors. Agriculture has been among major economic pillars supporting this rapid growth and regarded as a key sector, which has contributed to growth, poverty reduction, and food security for the people.

During 2004-2010, agriculture has had a growth rate of approximately 5.8%, supported by crops as the key growth driver, followed by fishery and livestock and poultry. Accelerating the growth of crops, in particular, was attributed to rapid land expansion, the introduction of new technology which helped boost productivity and production yield, along with high commodity prices at the regional and global markets, and improved regional integration for cross border trade. The robust growth of this sector contributed 1.4% to the average economic growth rate of 6.5% during 2004-2013.

Besides its contribution to growth, this sector supported the government's policy of reducing poverty headcount nationwide. The World Bank's Report "Cambodia's Agriculture in Transition: Risk and Opportunities in 2015" found out agriculture contributed 60% to poverty reduction from 50% in 2007 to 21% in 2011. In a similar stride, the data calibrated from the Cambodia Socio-Economic Survey (CSES) suggested agriculture still significantly contributed around 44.7% to poverty reduction from 19.8% in 2012 to roughly 9.4% in 2017. Besides, the agriculture sector also helped to improve national food security, particularly as the Kingdom has transformed from net rice importing to net rice export country and achieved a declining share of undernourished people to total population—from 32% in 2000 to 14.2% in 2016, according to FAO's Assessment Report.

As a priority sector, the Royal Government of Cambodia (RGC) has incorporated agriculture into major national development policies and strategies such as the Rectangular Strategy (RS now its phase four of implementation), National Strategic Development Plan (NSDP), Industrial Development Policy (IDP) 2015-2025 and Agriculture Sector Strategic Development Plan (ASDP).

To support priorities outlined in these documents, the Royal Government has, over the years, increased public investment financed by both state budget and development partners' funds (loans and grants) for this sector. Public spending financed by the state budget for both MAFF and MOWRAM has increased by 1.8 folds—from USD 54.7 million in 2011 to USD 98.7 million in 2017 while the public spending funded development partners' budget was around USD 170 million per annum. Public spending has been particularly oriented toward the enhancement of irrigation infrastructure, capacity building, agriculture extension services.

While the public spending on agriculture has been on the rise, this sector has not performed well during 2011-2017. During 2011-2017, the agriculture sector has experienced a decelerating growth with the average rate of 1.8% and only 1.0% over the last few years, down from 5.8% per annum during 2004-2010. The share of this sector to GDP dropped from 34.6% in 2011 to around 23.6% in 2017, and its contribution to growth declined from 0.8% to 0.3% in the corresponding period. This does not seem to fully explain this divergence between its softening growth and public spending on this sector.

In the context of a diverging trend between agriculture growth and public spending, it is imperative to review the spending on agriculture so as to better understand the situation, the issues and challenges, and find ways to further improve this important sector. This is because as a priority sector, the agriculture sector still has huge potential to be unleashed, particularly given its importance to Cambodia's economy, people's livelihood, food security, and strong expected demands for agriculture commodities, especially relatively niche products. Thus, the Analytic Unit for Agriculture Sector of the Supreme National Economic Council (AUAS-SNEC), with the support from and collaboration with ASPIRE, finds it necessary and is tasked to conduct this research study entitled: **"the Review of Public Investment in Agriculture Sector"**. The findings from this research is expected to provide policymakers and development partners with the objective information to make decisions on how to move this sector forward to further contribute to Cambodia's development, particularly in the aspects of resource allocation, as well as sectorial and economic functional prioritization of this sector.

2. Research Objectives

This study aims to assess the impact and efficiency of public spending on agriculture sector over the last several years, particularly between 2011 and 2017. The study has five specific objectives as follows:

1- Taking stock of public spending, disaggregated by sources, sub-sectors, and economic compositions;
2- Assessing the impact of public spending on agriculture growth, overall economic growth, national food security, poverty reduction and job creation;
3- Assessing the level of efficiency of public spending in agriculture at allocate level by focusing budget allocation to sub-sectors and economic functionalities;
4- Analyzing the critical issues and challenges, potentially affecting the efficiency of spending; and
5- Providing recommendations to enhance the efficiency of public spending.

3. RESEARCH METHODOLOGY

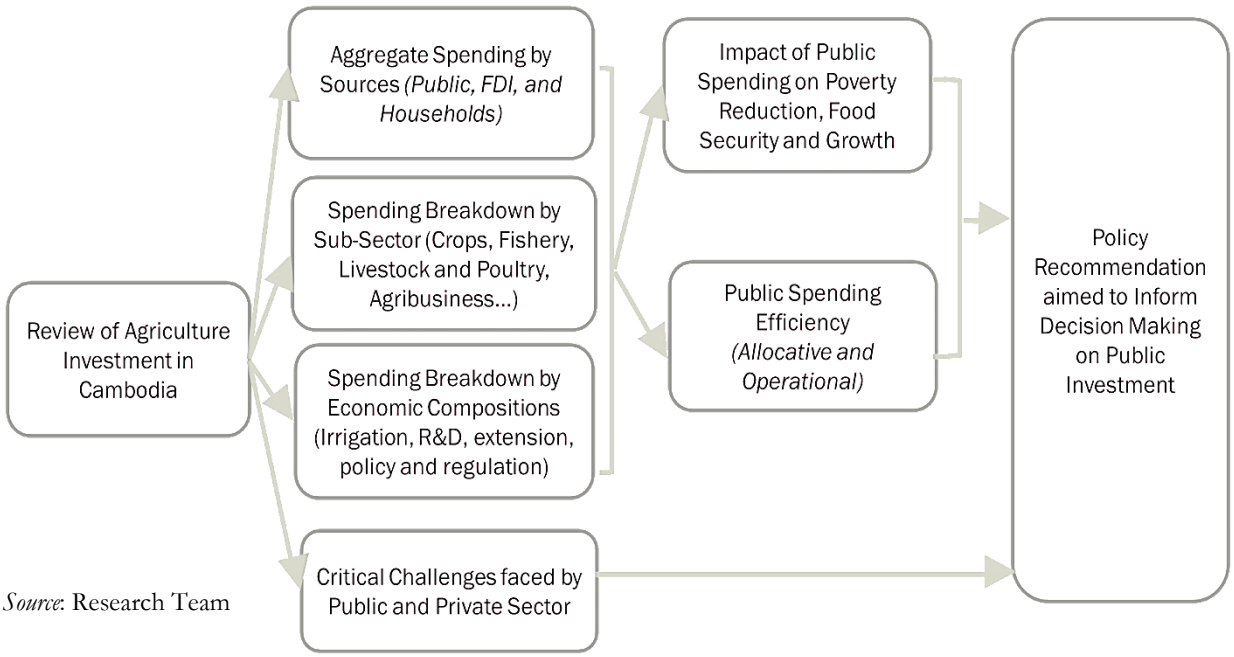
3.1. Data Collection

To achieve the above objectives and support the analysis of this study, the methodology of this research will base on both secondary and primary data from various sources. For secondary data, the team conducts desk reviews of research findings and publications done by World Bank, ADB, CDRI, and other institutions, public expenditure review done by World Bank, CDC database, agriculture investment strategies and models applied by various countries in the region. For primary data, the research team conducts consultation meetings with stakeholders including government agencies such as Ministry of Agriculture, Forestry and Fishery (MAFF), Ministry of Water Resource and Meteorology (MOWRAM), Cambodian Development Council (CDC), Ministry of Commerce (MOC), and National Bank of Cambodia (NBC), development partners including World Bank, Asian Development Bank (ADB), IFAD, AFD, EU, UNDP etc. Besides, in order to assess the critical challenges faced by private sector to invest in agriculture sector, the research team also had consultation meeting with Chamber of Commerce, EuroCham, Amru Rice Co.Ltd, CP Cambodia Co.Ltd, etc. and conducted fieldwork with provincial department of agriculture forestry and fishery, agriculture cooperatives, farmers, farmer water user groups, local and international agro-processors in Pursat, Battambang, Siem Reap, Kampong Thom, and Kratie. Finally, workshops have been conducted to review and verify the findings with relevant stakeholders.

3.2. Analytical Framework

The systematic analysis of this research has been indicated in **Figure 1** below. In the first stage, the research team estimated the aggregate amount of spending in agriculture and sources of financing. Sources of spending consist of (1) public budget and development partners' loan and grants which called is public spending, (2) foreign direct investment (FDI) and (3) spending by household which includes formal and informal domestic investors and farmers. Additionally, the framework also focuses on spending breakdown by (1) sub-sectors including crops, fishery, livestock and poultry, and agribusiness, and (2) spending breakdowns by economic compositions consisting of irrigation, research and development, agriculture extension services, institutional capacity, policy and regulations. In the second stage, based on the amount of spending by sector, sub-sector and economic compositions, the assessment of impact of spending on growth, food security and poverty reduction and its degree of efficiency at the allocative and operational levels is conducted. Private sector plays an important role in stimulating the agribusiness activities in various stages of value chains. Therefore, the framework also incorporates the critical challenges and issues faced by the private sector as well as challenges faced by the public sector. Based on findings from various components, the analytical framework focuses on policy recommendations aimed to inform decision making on how to move this sector forward to further contribute to Cambodia's development, particularly in the aspects of resource allocation, as well as sectorial and economic functional prioritization of this sector

Figure 1: Analytical Framework for the Review of Public Investment in Agriculture Sector



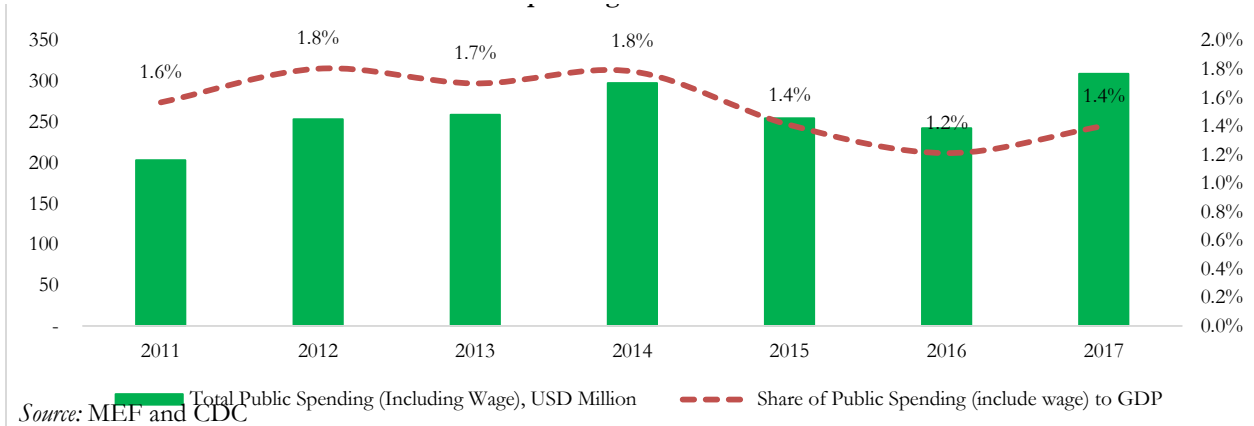
Source: Research Team

4. PUBLIC SPENDING ON AGRICULTURE IN 2011-2017

4.1. Aggregate Public Spending on Agriculture

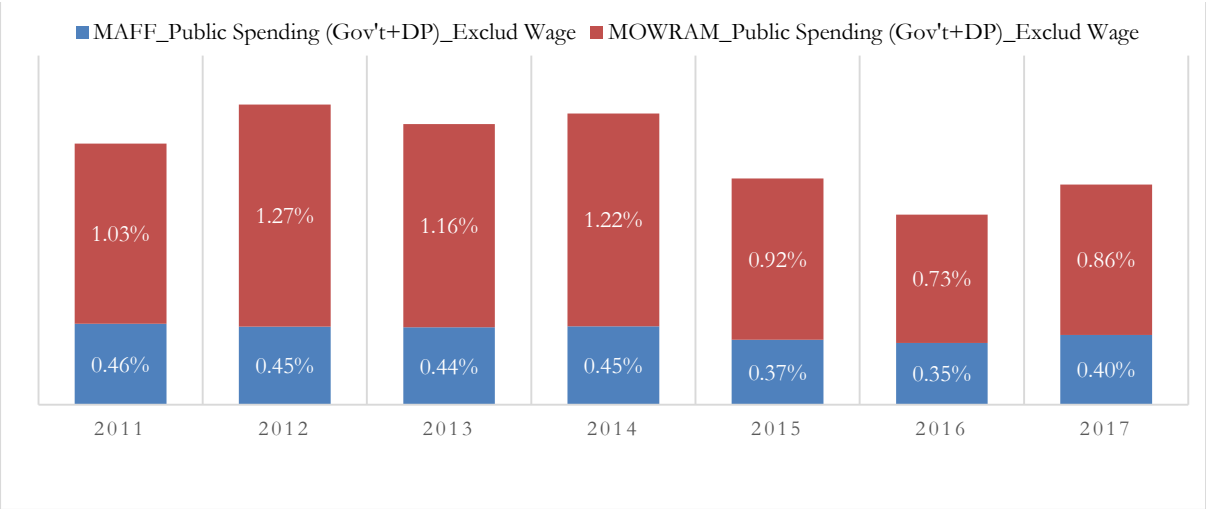
During 2011-2017, Cambodia's estimated aggregate public spending financed by both government's budget and development partners' budget (both concessional loan and grants) on agriculture sector around USD 272.6 million per annum, which was equal to 1.6% of gross domestic product (GDP) **(see Figure 2).** Among of which, MAFF's public spending shared around 0.43% of GDP and MOWRAM's public spending shared 1.17% of GDP during this corresponding period.

Figure 2: Public Spending on Agriculture



Source: MEF and CDC

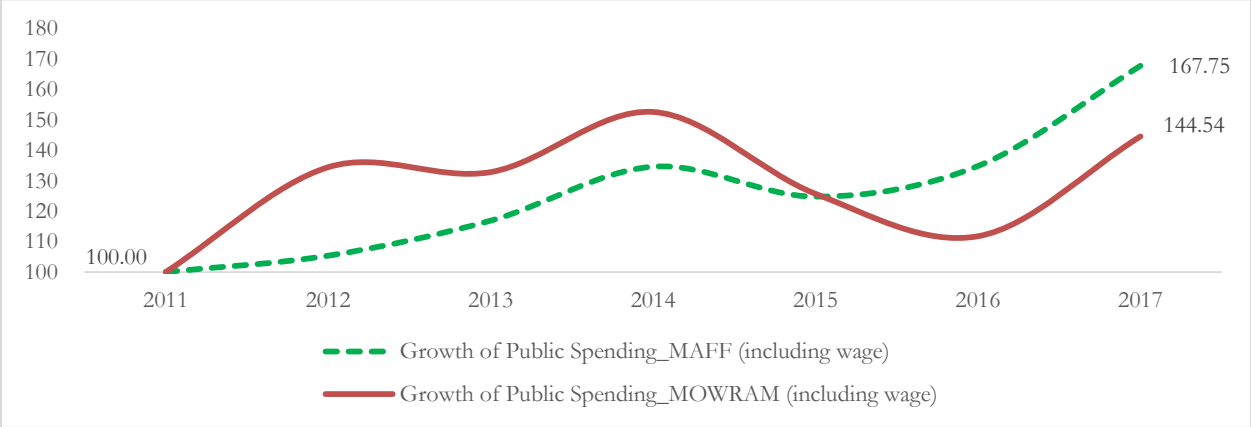
Figure 3: Share of Public Spending by Ministry (Gov't and DP's Budget), % of GDP [excluding wage]



Source: MEF and CDC

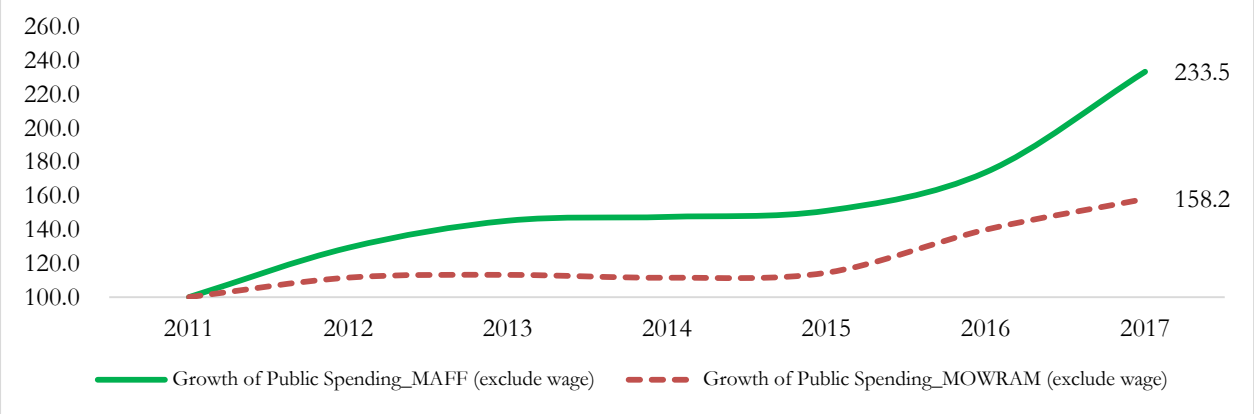
The Ministry of Agriculture, Forestry and Fishery (MAFF) absorbed around 33% of total spending basket or USD 85.7 million per annum while the Ministry of Water Resource and Meteorology (MOWRAM) absorbed 67% which was equal to USD 174.3 million per annum. If excluding wage, during 2011-2017, public spending on agriculture sector under the responsibility of MAFF was increased by 2.33 folds while public spending attributed to project and activities handled by MOWRAM was increased by 1.58 folds.

Figure 4: Growth of Public Spending for MAFF vs. MOWRAM (including wage)



Source: MEF

Figure 5: Growth of Public Spending for MAFF vs. MOWRAM (excluding wage)

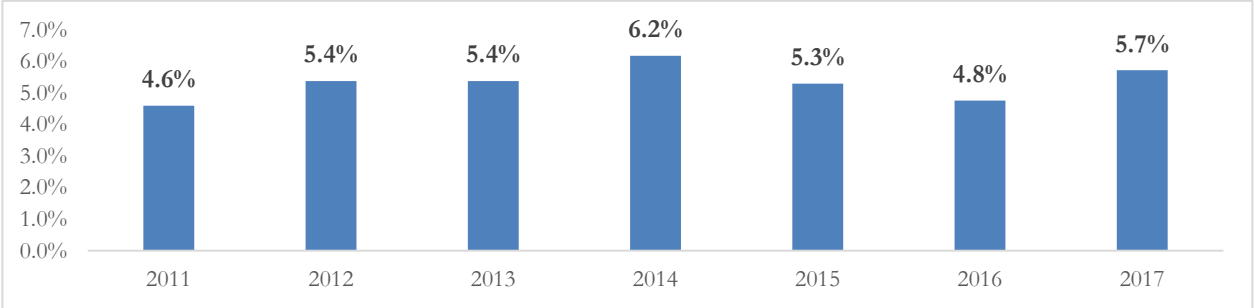


Source: MEF

Public spending on agriculture shared around 5.3% to agriculture GDP in average during 2011-2017. Disaggregated by sub-sector of agriculture, the percentage of public spending to respective agriculture sub-sector GDP was quite diverse. Public spending on crops constituted 6.4% of crops GDP, public spending on livestock and poultry was around 4.1% of livestock and poultry GDP

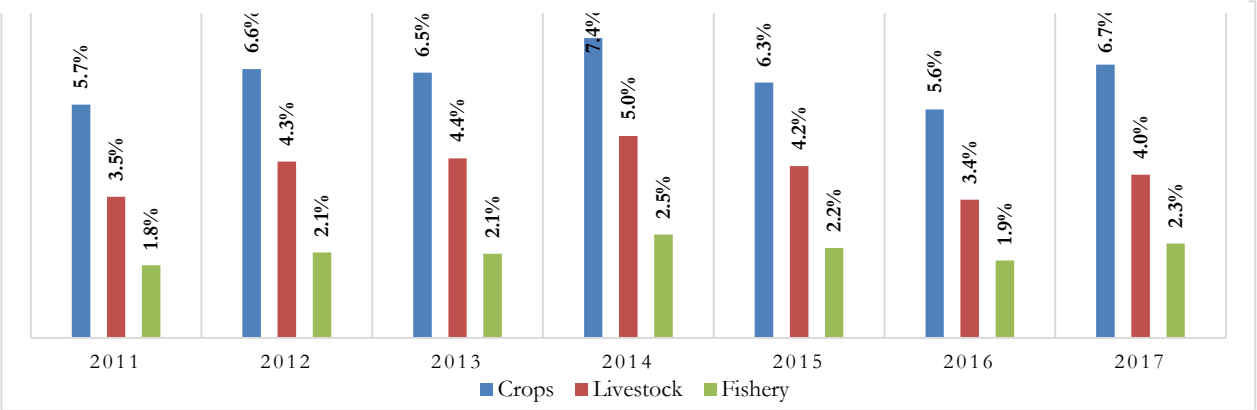
while public spending on fishery was only 2.1% of fishery GDP on average in the same corresponding period. Fishery and Livestock and Poultry sub-sectors are quite potential, which deserve more attention and in need of further support **(see Figure 6 and Figure 7).**

Figure 6: Public Spending on Agriculture as % of Agriculture GDP



Source: Author's Calculation Based on Data from NIS, MEF and CDC

Figure 7: Public Spending on Agriculture Sub-Sectors as % of Agriculture Sub-Sector GDP



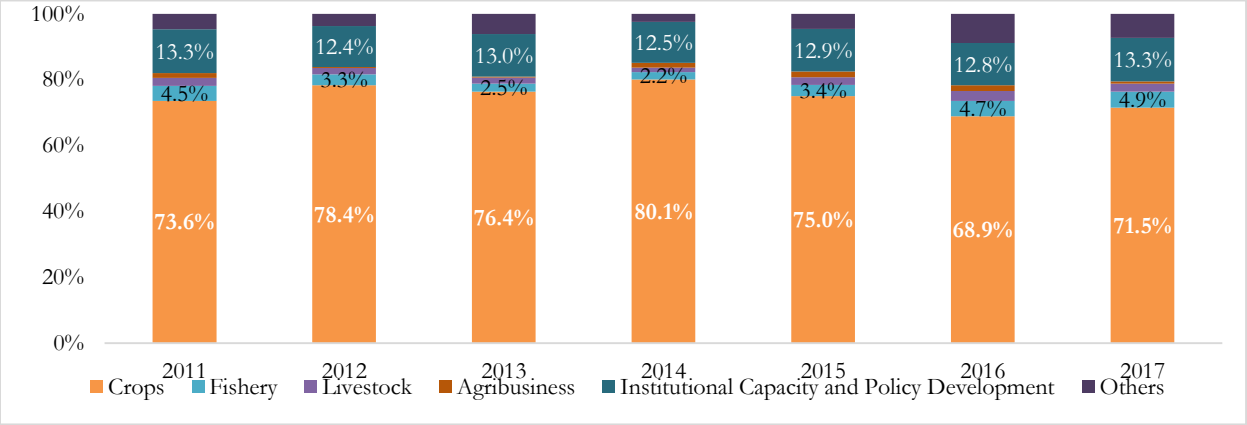
Source: Author's Calculation Based on Data from NIS, MEF and CDC

4.2. Public Spending by Sub-Sectors

As highlighted in above section, public spending in agriculture was around USD 272.6 million per annum during 2011-2017, by which crops absorbed up to 74.8% of the total spending basket, which was heavily attributed to irrigation scheme while the share of average public spending on fishery and livestock has been small—around 3.7% and 2%, respectively. This huge public spending gap could be the critical factor, which indicated that these sub-sectors have not received sufficient and potentially have been linked to their relatively weak performance over the last several years. This has led Cambodia to not able to secure sufficient and competitive supply of fish and meat to accommodate local demands. To fill this gap, Cambodia relies on import fish and meat from neighboring countries. The recent estimate has shown Cambodia have imported around USD 200 million worth of fish, mostly from Vietnam, and imported around USD 170 million worth of meat.

These import figures have shown a huge potential that Cambodia could further leverage to create more added value to economy through capturing this demand. These figures suggest public spending on fishery and livestock sector need be further sharply increased to capture this opportunity while the public spending on crops could be increased, though in a steady pace. In addition, the rationalization of key sub-sector priorities including rice, and non-rice commodities need to be taken into consideration.

Figure 8: Share of Public Spending by Sub-Sector 2011-2017

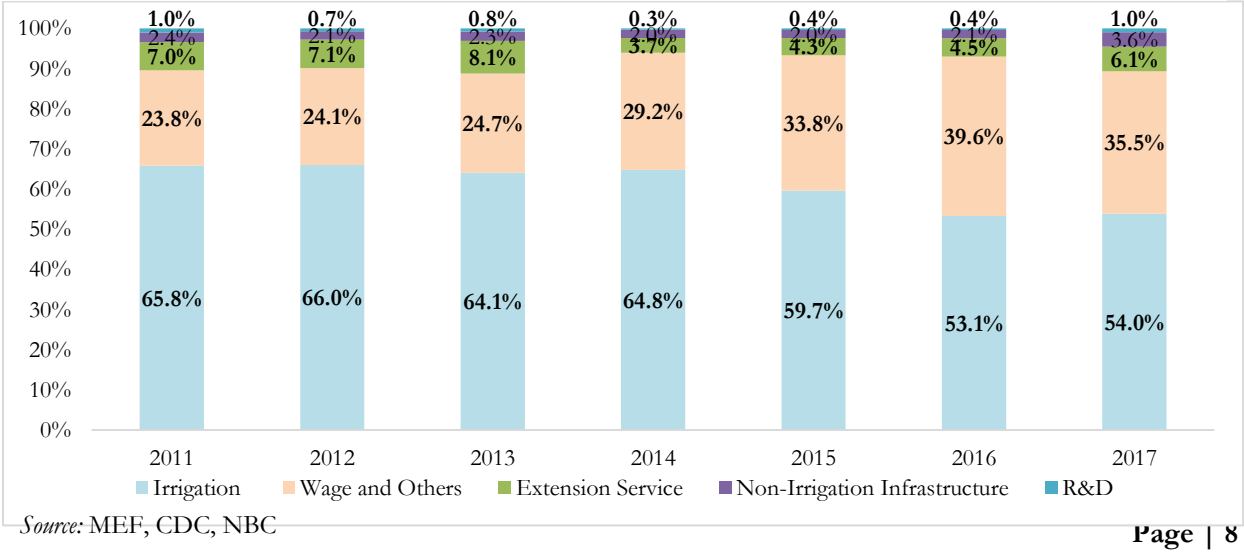


Source: MEF, CDC, NBC

4.3. Public Spending by Economic Compositions

Disaggregated by economic compositions, out of USD 272.6 million of public spending, irrigation scheme absorbed more than 50% while the other key economic functionalities such as agriculture extension services and research and development (R&D) 5.8% and 0.7% per annum respectively (**see Figure 10**).

Figure 10: Share of Public Spending by Economic Compositions



Source: MEF, CDC, NBC

Investment in irrigation infrastructure is one of the key priorities and the Royal Government has injected around 2 billion in the last two decades. This investment has been timely and needed. However, a large proportion of this investment has been concentrated on large schemes while the medium and small schemes have not been much prioritized, leaving some farmers have been struggling with shortage of water to irrigate their crops. In addition, the main focused commodity benefiting from irrigation scheme is rice while farmers growing other commodities such as vegetable, fruits and other industrial crops have limited access to water. Insufficient investment and a lack of focus on small and medium irrigation have caused farmers to bear with higher production cost in their cultivation because they need to spend on transporting the water from the large schemes to irrigate their rice.

In light of this, while the increase investment in irrigation over the last decade has been strategic and instrumental to the growth of specific commodity, predominately rice, it may have not been well-balanced and sufficiently diverse in which the government may need to consider to re-prioritize and rationalize the irrigation schemes and such support shall be linked to key and potential commodities more than just rice. This is because the available irrigation in support of some identified commodities is essential to support the agriculture development in the medium and long term.

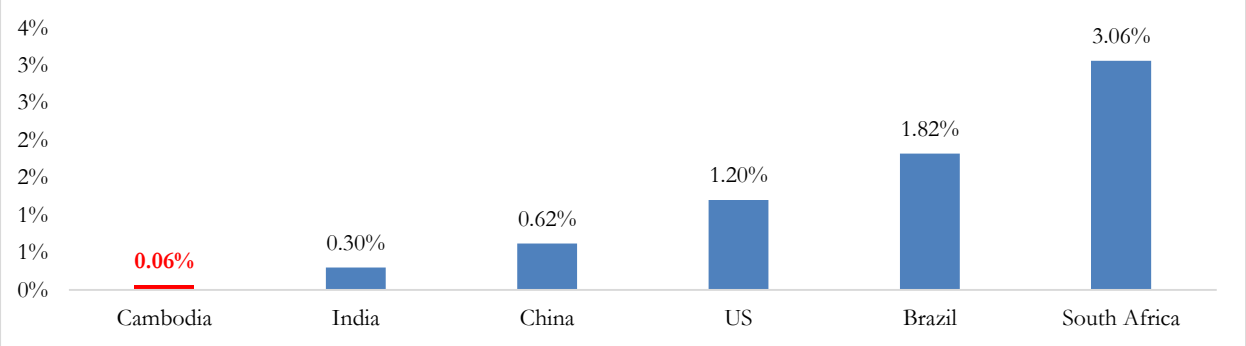
The evidence from fieldwork has suggested the investment in irrigation has been mainly concentrated on construction of the infrastructure, but limited focus has been on building capacity of farmers to take ownership, manage and distribute water effectively, which would raise the questions of sustainability. Thus, it is important the relevant government agencies—Ministry of Water Resources and Meteorology (MOWRAM) in collaboration with local authorities and other relevant stakeholders, should review its approach so as to further emphasize on building institutional capacity of Farmer Water User Groups (FWUGs) to operate and manage the scheme in a sustainable manner**.**

Though a small proportion spent on Research and Development (R&D) compared to other key economic functionalities, R&D is well researched suggesting its important role in stimulating the growth of agriculture sector. The international experience has shown increased spending on R&D could positively boost the output growth of agriculture sector as this investment results in better farming technique, technology, good quality seeds—either for crops, fish and livestock, and other

major outcomes, agriculture productivity—land productivity, labor productivity and total factor productivity.

Based on the below diagram **(Figure 9)**, the average share of public spending on R&D—either financed by government's budget and development partners' budget has been quite low ranging from 0.3% to 1% over the last several years. If compared to some selected countries in the region, Cambodia's public spending in Agriculture R&D was quite low—around 0.06% of agriculture GDP, while other countries such as India (0.3%), China (0.62%), Brazil (1.82%), and South Africa (3.06%). This figure has pointed out to insufficient focus and support on R&D in Cambodia. With a relatively weak R&D in Cambodia, farmers need to import various kinds of crops seeds (except rice), fish and animal seeds from neighboring countries without proper quality control and inspection by authorized institutions, which may negatively affect the productivity and production yields. Moving forward, it is imperative the government increases investment in R&D in collaboration with key local and international stakeholders in order to boost the agriculture productivity. The efficient strategy to conduct R&D is to renovate and contextualize the existing technique and technologies which could be effectively applied by farmers and agribusiness.

Figure 9: Percentage of Public Spending in Agriculture R&D of Agriculture GDP (2017)



Source: Author's Calculation, ASTI and tradingeconomics.com

In addition, agriculture extension services are also another crucial component to enhance the growth of agriculture productivity which in turn supports the growth of agriculture sector. Based on below **Figure 10**, the share of public spending on agriculture extension services has been quite small—around 5% of the total public spending basket even though spending in this functionality has been eventually increased over the last decade. The analysis from the field has singled out that many actors have participated in provision of agriculture extension services to farmers, but the knowledge and information has not been well acquired and practiced by farmers. Rice farmers have learnt and had better farming techniques compared to other groups of farmers who grow other industrial crops,

livestock and poultry, and aquaculture. This is because more rice sector related projects have been implemented compared to commodities. Farmers especially those growing industrial crops still have limited knowledge and techniques to do effective farming.

Through the analysis pointing out to various challenges including land preparation, pest management, fertilizer application and post-harvest management, the farming technique gap has been predominately attributed to two factors: (1) under-public spending on agriculture extension causing limited activities and low incentives to be implemented on the ground; and (2) current activities and projects related to agriculture extension services have not been well coordinated and harmonized among key actors—most of them have been implementing in silos, by which farmers reportedly received different instruction and knowledge from different extension practitioners for the same topic.

Non-irrigation infrastructure and equipment including storage facility, cooling storage, other facilities to support agriculture value chain has also accounted for a small share of approximately 2.3% of the total public spending. This investment is important for the management of agriculture commodities in the post-harvest stage. They accommodate not only quality agro-processing into higher added value, but also commercialization of agriculture commodities. It has been recognized that there has been remarkable progress of storage facility and drying facilities financed by government's concessional loan to rice millers through the Agriculture and Rural Development Bank (ARDB) while further progress on this aspect needs to further leveraged and supported. However, the other non-rice sector supporting facilities such as cooling room, wholesale market for vegetable and fruits, cleaning and packaging factories have a huge public spending gap, requiring the government to bridge this gap. With insufficient investment in the infrastructure and equipment, farmers and agribusinesses could not maximize the economic values from agriculture products they merchandize. One of the most critical challenges for the farmers concerns the vegetable sector. Since they do not have access to cooling rooms to preserve vegetable and nearby wholesale markets, they need to immediately sell their produce to local traders and middlemen, and most of the time they have been suffered of price fluctuations.

Based on the evidence above, while the increase investment in irrigation over the last decade has been strategic and instrumental to the growth of specific commodity, predominately rice, it may have not been well-balanced and sufficiently diverse. The government needs to consider re-prioritizing and rationalizing the irrigation schemes vis-à-vis the spending on other economic compositions such as R&D, extension and other non-irrigation infrastructure, which may have not received large share

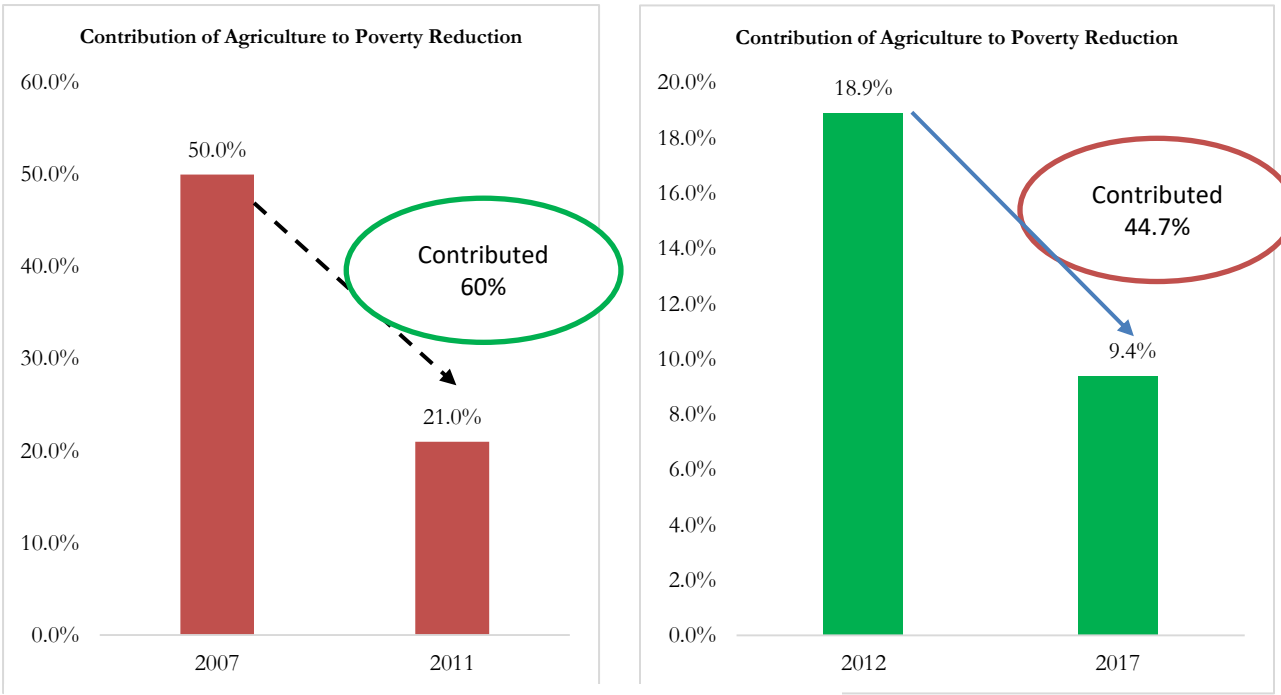
of the spending, to better support the growth and development of the agriculture sector. In addition, such consideration shall be fully studies and linked to key and potential commodities more than just the rice sector. This is not just to suggest abandonment of the irrigation schemes. Rather, it is important the government takes into account the support provided to other economic compositions and other commodities because these aspects are essential to support the agriculture development in the medium and long term.

5. IMPACT OF PUBLIC SPENDING ON SOCIO-ECONOMIC DEVELOPMENT

5.1. Impact of Public Spending on Poverty Reduction

Alongside services and industry sectors, the agriculture sector has played an important role in Cambodia's socio-economic development journey, particularly at the early stage when Cambodia first opened its economy to the outside world in the 1990s. The 2015 World Bank's Transition Report has maintained agriculture has been effective in reducing poverty headcount. Evidently, the report has documented that the agriculture sector contributed 60% to poverty reduction from 50% in 2007 to 21% in 2011. In addition, our recent estimate based on available data in CSES has suggested agriculture also pointed out to a similar point since the agriculture sector has contributed 44.7% to poverty reduction from 18.9% in 2012 to 9.4% in 2017.

Figure 11: Contribution of Agriculture to Poverty Reduction



Source: WB and Research Team's Calculation based Data from CSES

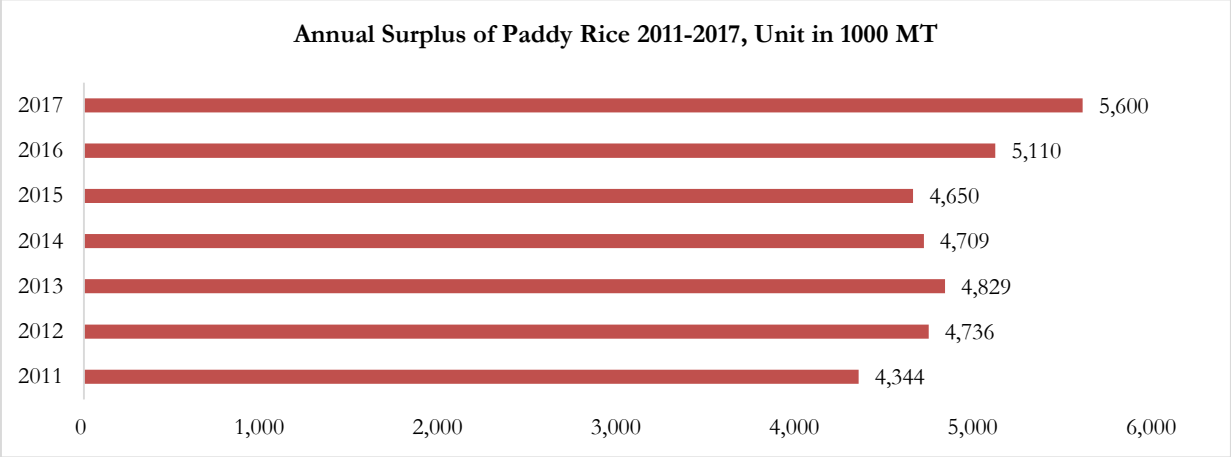
At the micro level, public spending on irrigation scheme has significantly contributed to improving livelihood of farmers whose rice field is closed to the schemes. Battambang and Pursat, two potential provinces in the rice sector, are the successful cases by which farmers living in some parts of respective provinces have significantly benefited from the public investment in irrigation schemes. The findings from field consultations with farmers, Farmer Water User Groups (FWUGs) and local authorities showed irrigation schemes have significantly helped thousands of farmers to improve their livelihood and somehow discourage migration. With irrigation schemes in place, farmers could expand their cultivation and rice production yield.

Evidently, since the Kanghort Irrigation Scheme located in Battambang province was built, 1400 households in 6 villages of Kampong Preang commune could increase rice cropping intensity from 1.0 to 2.0 per year and they could increase production yield from 2.25 tons per hectare to 4.5 tons per hectare. Shared with the successful case of Kanghort Irrigation Scheme, thousands of farmers living in Pursat province have also been delighted when they could transform their living conditions through rice farming. This could not happen without the irrigation scheme called Charit Irrigation Scheme located in Pursat. With the scheme which covered on 16,000 hectares of cultivated area, farmers could increase their production yield from 1.75 tons per hectare to 3.5 tons per hectare. The schemes in both provinces have significantly improved their living conditions because they could earn more income from selling the paddy rice. The remaining challenge, however, is the ability of the famers to maximize their income. Through accessibility to water significantly improved compared to the past, farmers have been struggling with the rising cost since they have to pump the water from the large canal to irrigate their rice, particularly as small irrigation schemes have been quite limited.

5.2. Impact of Public Spending in Agriculture on Food Security

Besides contribution to poverty reduction, the development of agriculture sector resulted from investment by government, development partners and households has significantly improved food security in the country, reflected through a self-sufficiency of paddy rice production and surplus for export between 4 million tons and 5 million tons per annum during 2011-2017 **(see Figure12).**

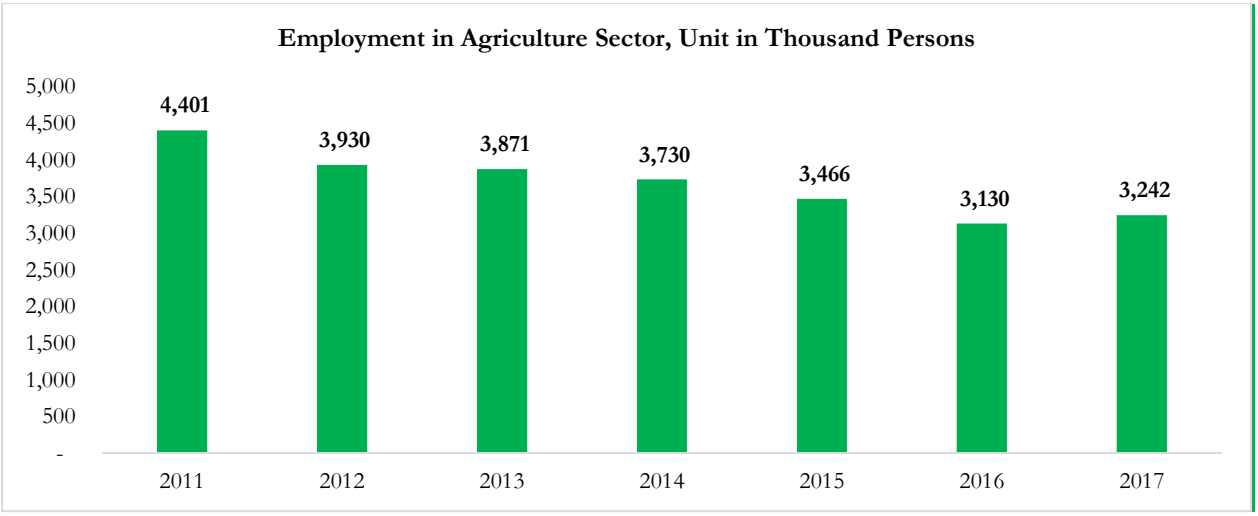
Figure 12: Annual Surplus of Paddy Rice



Source: MAFF

The public spending contributing to boost agriculture production has created more than 3 million employments per annum to people in the rural area during 2011-2017, which was equivalent to between 36% and 40% of total active labor force **(see Figure13)**. This has illustrated the contribution and importance of the agriculture sector to the overall economy during this period.

Figure 13: Employment in Agriculture Sector



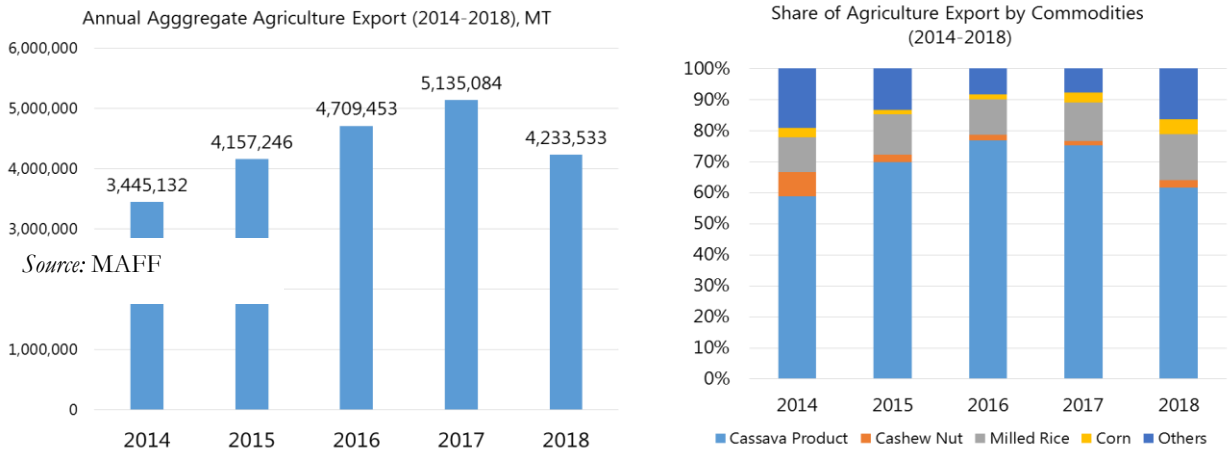
Source: CSES

5.4. Impact of Public Spending on Agriculture Commercialization

Public spending over the last seven years have stimulated the growth of agriculture production, ultimately enabling farmers to have surplus of produce for sales to generate income. Remarkably, during 2014-2018, Cambodia could export more than 4 million tons per annum to foreign markets,

cassava product constituted the largest share. However, most exported agriculture commodities were not processed up to higher added value yet. So far, only 10% of agriculture produce is fully processed.

Figure 14: Export Volume and Export Share of Agriculture Products



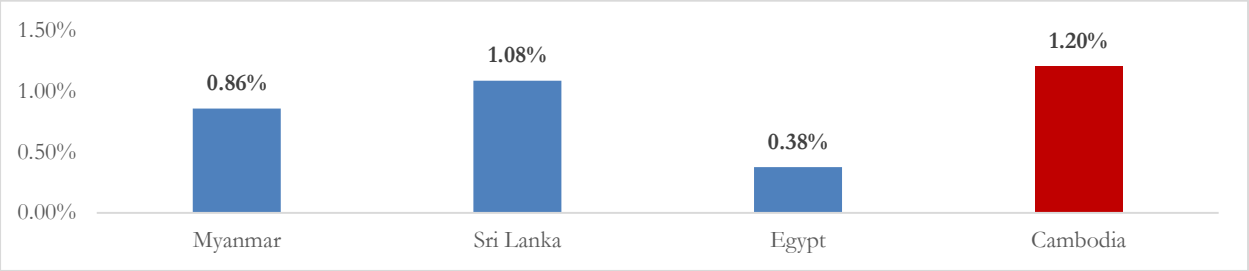
6. ADEQUACY ANALYSIS OF PUBLIC SPENDING ON AGRICULTURE

There is no commonly specific theory and tool to assess whether public spending on agriculture in a particular country is sufficient or saturated given the stage of development and economic structure. To simplify the analysis, the comparison of country' public spending in agriculture as percentage of Gross Domestic Product (GDP in current price 2010) is employed as a good indication and comparison. In relation to this, four countries are selected for comparison including Cambodia, Myanmar, Egypt, and Sri Lanka which have relatively similar economic structure and shared a similar stage of development.

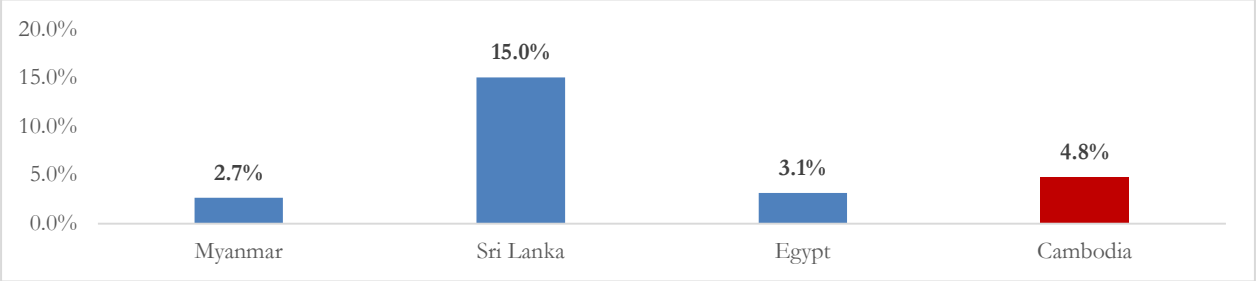
Calibrated from raw data generated from FAO and World Bank, the results have yielded the following points. In 2016, Cambodia's public spending in agriculture as percentage of GDP was around 1.2%, higher than other countries'—including Myanmar (0.86%), Sri Lanka (1.08%) and Egypt (0.38%) (**see Figure 15)**. In addition, the share of Cambodia's public spending on agriculture to the GDP of the sector in comparison with other selected countries—Myanmar, Sri Lanka and Egypt have been 4.8% higher than Myanmar's (2.7%) and Egypt's (3.1%), but quite lower than Sri Lanka's (15.0%) (**see Figure 16)**. This at the macro-level has indicated Cambodia's public spending in agriculture has not been small if compared to other countries with similar economic structure and

Figure 15: Public Spending on Agriculture as % of GDP by Country

development stages. In addition, the spending in Cambodia as shown above have been rising, but the growth of this sector seems to be softening - suggesting a divergence.



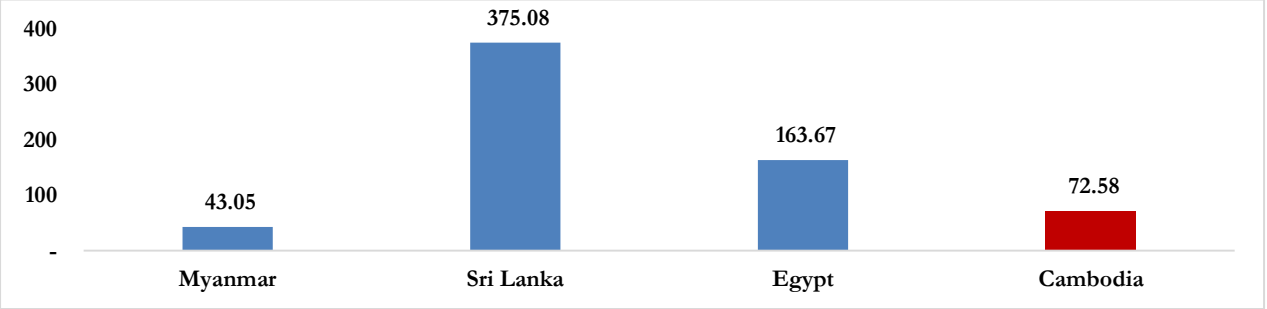
Source: Author's Calculation, WDI and FAO



Source: Author's Calculation, WDI and FAO

However, at the micro level, it is noticed that Cambodia's public spending in agriculture per farmer was lower than peer countries. The figure below showed Cambodia's public spending per farmer was USD 72.58, much lower than Sri Lanka's of USD 375.08 and Egypt's of USD 163.67, but higher than Myanmar's of USD 43.05.

Figure 17: Public Spending in Agriculture per Farmer by Country (USD, 2016)



Source: Research Team's Calculation based on Data of FAO and WDI 2016

7. EFFICIENCY ANALYSIS OF PUBLIC SPENDING ON AGRICULTURE

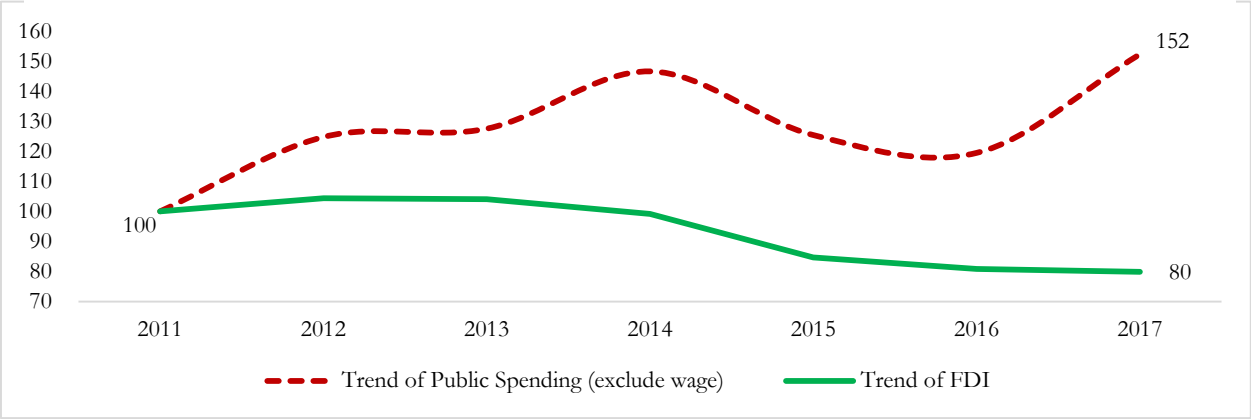
The efficiency of spending is assessed by looking into three correlations: (1) the relationship between trend of public spending and trend of foreign direct investment inflow, (2) the relationship between the trend of household's spending and household's income, (3) the public spending and growth rate of agriculture sector.

7.1. Public Spending and FDI

By theory and global experiences, public investment in the key priorities of agriculture sector—both soft and hard infrastructure, is crucial to encourage the private sector to invest in agribusiness. However, it was not the case for Cambodia's agriculture sector. **Figure 18** clearly demonstrated when the government increased public spending (excluding wage) up to 1.52 folds over the past seven years (2011-2017), the flow of foreign direct investment in agriculture kept declining by 20% in the corresponding period. This negative correlation has implied the effort made by the government to increase public spending especially in irrigation scheme infrastructure and other relevant priorities was not effective and attractive enough for international companies to invest in agriculture in Cambodia.

Even though the government has granted tariff exemption on the import of agriculture inputs such as fertilizers, seeds, machineries and other equipment, from private sector perspective, given its high risk and uncertainty by nature, the government's incentives granted to agriculture sector remain limited and need of further rationalization. In addition, the findings from the field consultation and comments by stakeholders in the workshop, major foreign companies have pointed out that they have not been interested in investing in agriculture in Cambodia because of the combination of following factors: (1) issue of law enforcement and confidence in the practice of agriculture land concession and contract farming, (2) relatively weak and costly trade facilitation particularly in the aspects of business registration and numerous inspections done by government agencies, (3) still-lacking sufficient access to water and water management at the local level - still in need of further improvement even though public investment in irrigation schemes significantly increased over the last seven years, (4) high cost of energy expenditure, (5) relatively weak enabling infrastructure, and (6) the lack of rural road connectivity.

Figure 18: Trend Analysis of Public Investment and FDI

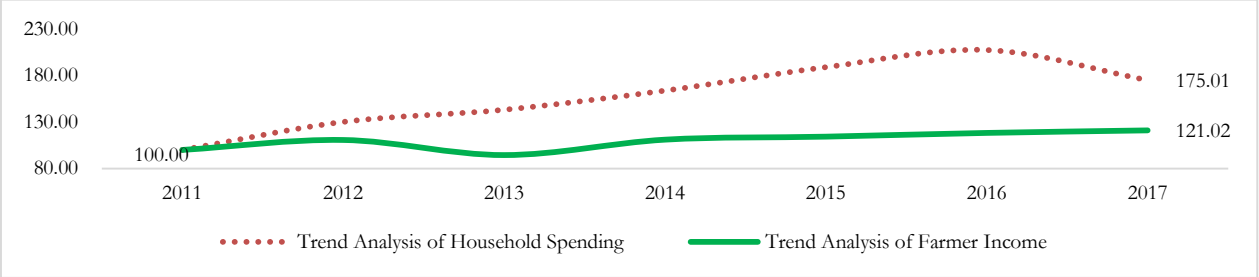


Source: MEF, CDC and NBC

7.2. Public Spending, Household Spending and Income

One of many important policy objectives of public spending is to address the issues faced by farmers, particularly in the aspect of increasing production efficiency, ultimately generating higher profit margin from engaging in farming activities. Over the last seven years, monthly household's income incrementally increased by 21%. However, the pace of household's income growth was much slower than that of household's spending on farming, which sharply increased up to 75% in the corresponding period (**see Figure 19**).

Figure 19: Household Spending and Household's Income



Source: CSES

This implied that the agriculture practice adopted by farmers have not been sufficiently efficient, reflected by a decelerating growth of agriculture productivity—labor, land and total factor productivity as indicated in later part of this report. Even though it does not seem to have a direct relationship with the public sector, the trend of both items could explain that the increased public investment did not efficiently and effectively address the issues faced by households, especially

related to how to make agriculture production more efficient with higher productivity growth. This issue has been consistent and aligned with the situation on the ground level in many aspects. Those include:

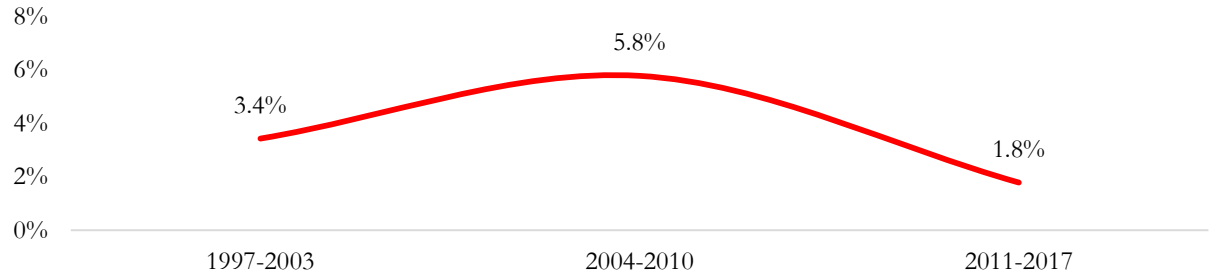
- First, it has been recognized that farmers could have better access to water for irrigating their crops, particularly rice when irrigation scheme was built; however, at the same time field findings also showed that farmers need to spend much more money on gasoline to do water pumping. This happened because of much limited small irrigation scheme directly connected to their rice field.
- Second, due to the lack of proper knowledge about technical farming, farmers have been struggling as they have been engaged with improper utilization of agriculture inputs such as seeds, fertilizers, pesticides, feeds, etc. bearing them higher production cost.
- Third, there has been a remarkable progress to boost agriculture mechanization—more than 90% of the total cultivated area. Current practice has mitigated the challenge of rising labor cost and shortage of labor forces. However, improper mechanization done by unskilled workers who command the machineries such as tractors and combined harvesters has caused farmers to have lost around 150KG to 200KG per hectare—which is equivalent to approximately USD 300 million per annum. So far, there has not been any significant policy interventions to address this deficiency of agriculture mechanization yet.
- Fourth, the continued inefficiency of agriculture production has been caused by low economies of scale as large percentage of household farmers is small scale. Establishing and strengthening the capacity of agriculture cooperatives is a good approach, potentially a model to enhance production efficiency and commercialization. However, the quality and capacity of agriculture cooperatives remain weak.

7.3. Public Spending and Agriculture Growth

Basically, the efficient public spending in agriculture has a direct positive relationship with the growth of agriculture output. However, in the case of Cambodia, public spending and the growth of agriculture sector did not have positive correlation over the past seven years (2011-2017). During this period, Cambodia has increased public spending by 52% on agriculture sector, but there seems no indication the public investment translated into the growth of agriculture sector. During 2011-2017, agriculture, however, experienced a decelerating growth of 1.8% per annum, down from 5.8% during 2004-2010. Crops, constituting the largest share, showed its slowdown from 8.1% during 2004-2010

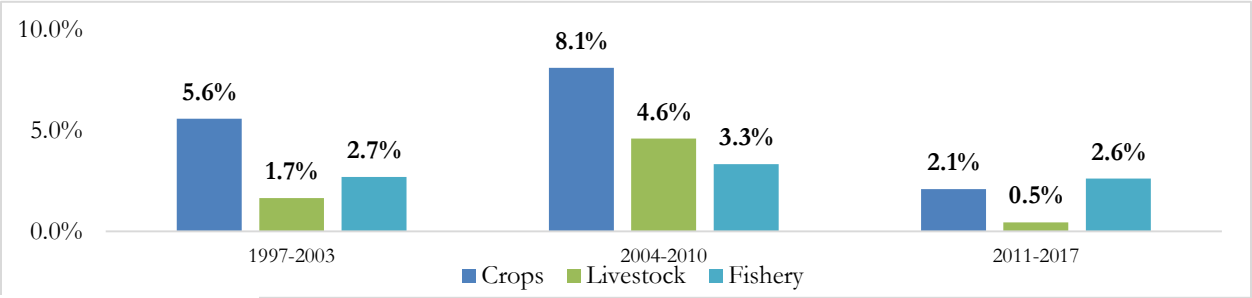
to 2.1% during 2011-2017, while livestock and poultry recorded the slowdown from 4.6% to 0.5% per annum, and fishery reported to have moderating growth from 3.3% to 2.6% per annum in the corresponding period **(see Figure 20).**

Figure 20: Annual Growth Rate of Agriculture Sector by Time Period



Source: NIS

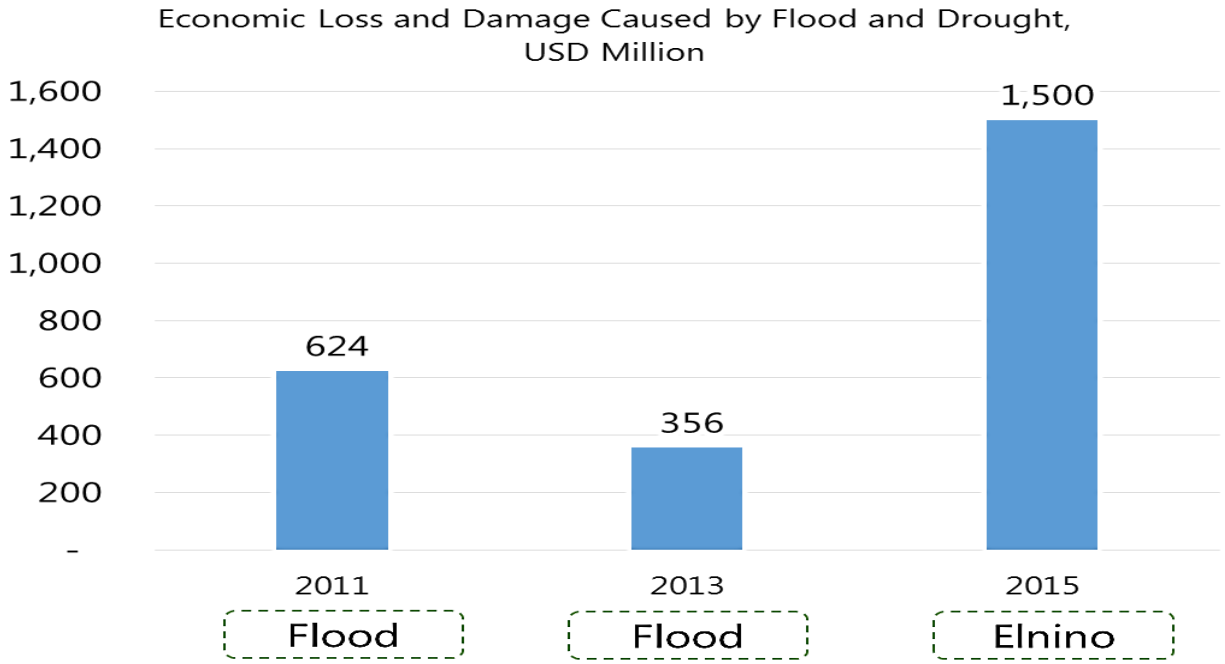
Figure 21: Annual Growth Rate of Agriculture Sub-Sector by Time Period



Source: NIS

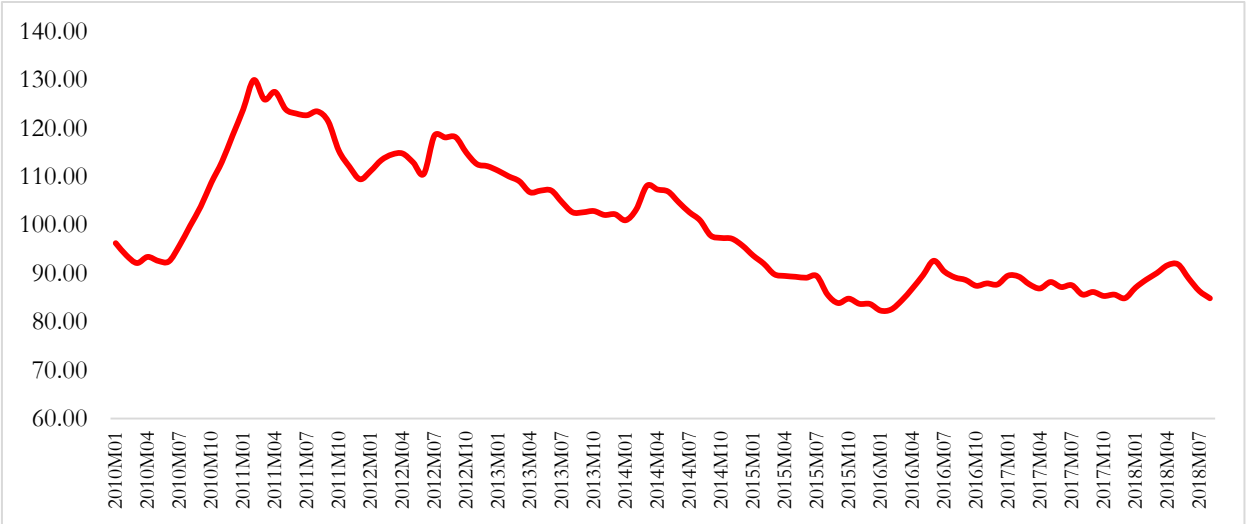
The eventually declined growth was attributed to 3 main reasons including: (1) negative impact by extreme weather events, (2) drop of agriculture commodities' prices, and (3) slower growth of agriculture productivity under the constraint of limited land expansion. In 2013 and 2015, because of flood and drought caused by El Niño phenomenon, Cambodia had the economic lost and damage of USD 203.9 million and USD 1.5 billion respectively (**see Figure 22**). In addition, the decelerating growth of agriculture was justified by the drop of agriculture commodity prices at the regional and global market, which generated negative spillover effect on Cambodian farmers' income.

Figure 22: Economic Loss and Damage by Flood & Drought



Source: NCDM, ADB

Figure 23: Agriculture Price Index (2010=100)



Source: WDI

However, two aforementioned factors did not explain the whole story about decelerating growth of agriculture sector in Cambodia. This was justified by the fact that during that period other countries in the region could achieve good growth rate of agriculture even though they were affected by the drop of agriculture commodities' prices and extreme weather condition. They could made such remarkable progress because they could maintain the growth rate of agriculture productivity despite on moderating trend.

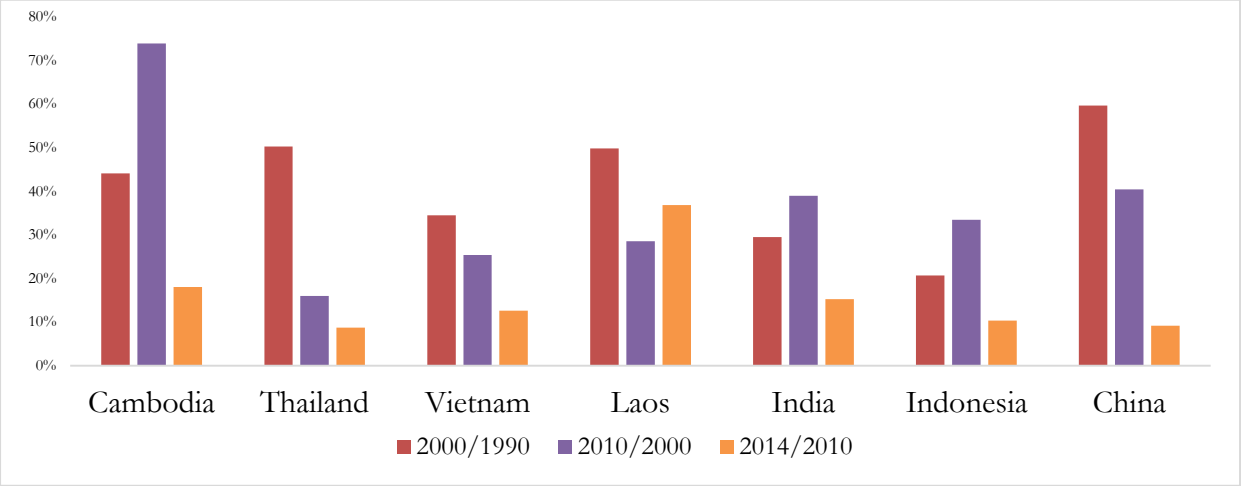
Cambodia's agriculture productivity experienced a much decelerating growth. Evidently, the growth rate of land productivity decelerated to below 20% in 2014/2010 from more than 70% in 2010/2000**.** This poor performance was reflected by the decelerating growth of production yield of paddy rice to only 0.1% per annum during 2013-2017, down from 3.6% per annum during 2008-2012**.**

The field consultations with stakeholders have indicated that much decelerating growth of land productivity was attributed to: (1) degradation of land quality, improper land use which is linked to farming technique, and small scale of land which negatively affects the efficiency of farming, (2) limited access to water despite remarkable investment in irrigation scheme, (3) inefficiency of labor in utilizing agriculture inputs such as sowing seeds, applying fertilizer, spraying pesticides, and cutting crops, etc. and (4) low quality of utilized agriculture inputs. On the top of those four main factors, the lack of public investment in research and development (R&D)—less than 1% of the total public spending basket would be the critical factor to negatively affect the growth of land productivity.

In relation to water, despite huge investment in irrigation scheme which enabled farmers in the specific areas in some provinces, accessibility to water to irrigate their crops, especially paddy rice remains the critical challenge. The public investment in irrigation sector mostly concentrated on large scale which heavily relies on rainfall. Because of this, at the macro level, with limited focus on small irrigation scheme, farmers could not fully access to water to irrigate their paddy rice field. Additionally, the findings from the consultation with development partners at the national level and focus group discussion with farmers at the provincial level, the capacity to effectively manage water by farmer water user groups (FWUGs) have been largely limited, which requires a huge improvement.

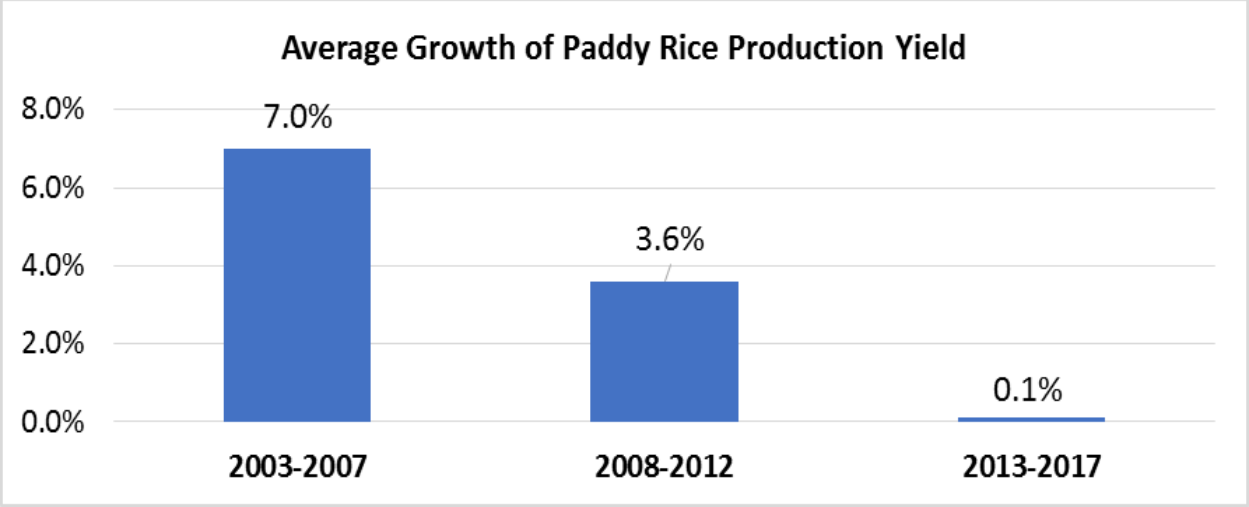
In addition, R&D plays an important role in accelerating the productivity of agriculture sector. During 2011-2017, R&D in rice sector conducted by CARDI was promising, reflected by the release of several seed varieties which respond to market demand, especially fragrant rice seeds. However, when looking at the macro level, the progress of R&D is quite slow, particularly on other non-rice commodities such as cashew, mango, aquaculture, livestock and poultry etc. Public spending in R&D was estimated to be less than 1% of total public spending basket in agriculture sector.

Figure 24: Growth of Land Productivity by Country



Source: WDI

Figure 25: Average Growth of Paddy Rice Production Yield



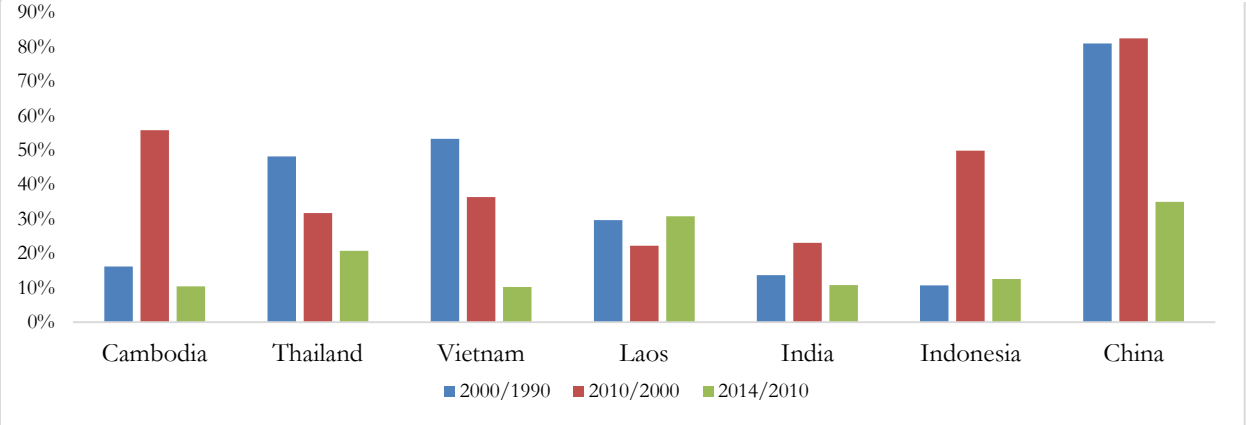
Source: MAFF

Similarly, labor productivity also showed the moderating growth rate to around 10% in 2014/2010 down from around 56% during 2010/2000**.** Decelerating growth of labor productivity was attributed

to four main factors including (1) share of public spending in extension services was relatively low—around 5.8% of total basket, (2) ineffectiveness of delivering extension services to farmers owing to inconsistency and difference of information and messages provided by various actors, (3) agriculture extension service was supply driven, rather than demand driven; and (4) lower degree of human capital of Cambodian people, especially farmers with lower level of education[2].

Concerning the aspect of improving farming technique, the annual public spending on extension services was estimated around 5.8%--equivalent to around USD 20 million of total public spending basket on agriculture. Despite a continuously increased public spending on this, large percentage of farmers in the field still do not have proper farming technique in pre, during and post-harvest. It has been noted rice farmers have demonstrated their improvement of rice farming by applying modern techniques introduced by government agencies, development partners and NGOs though there is some room for improvement. However, farmers who grow other subsidiary and industrial crops such as cassava, corn, cashew, and those who raise livestock and poultry as well as aquaculture have limited farming techniques of how to produce efficiently. Additionally, when delivering extension services, different agencies have different and inconsistent language or information, causing farmers to have difficulties to follow.

Figure 26: Growth of Labor Productivity by Country



Source: World Bank

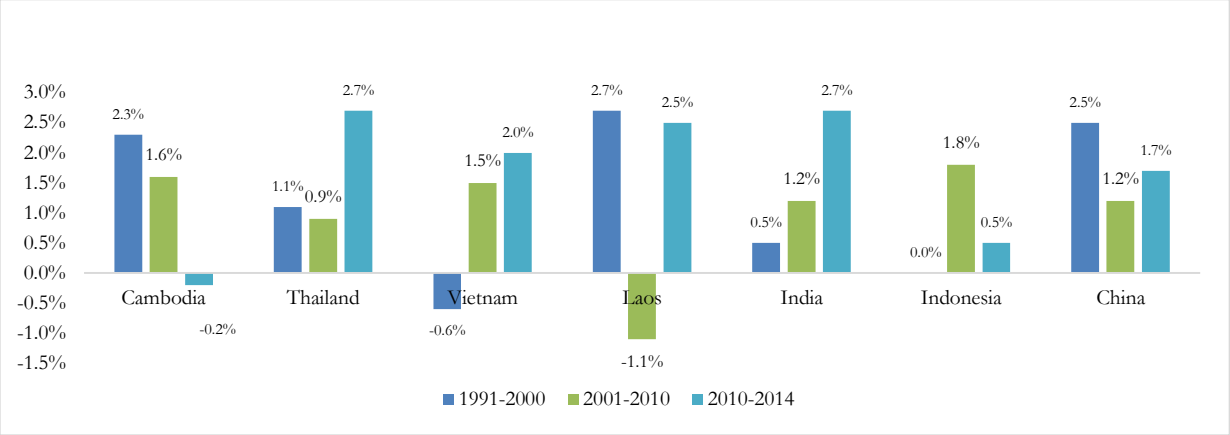
If looking into agriculture total factor productivity (TFP), Cambodia was much behind other countries in the region. When almost all countries demonstrated good result of boosting the growth

[2] According to World Bank, human capital index (HCI) of Cambodia was 0.49, lower than Thailand, Vietnam and Indonesia with the HCI of 0.60, 0.66 and 0.53, respectively.

total factor productivity which has been linked to technology and capital utilization, Cambodia experienced negative growth in 2014/2010 and latest statistics showed the total factor productivity (TFP) index of Cambodia has been moving on the zero growth rate trend over the last five years. According to global experiences, total factor productivity is crucial to accelerate the growth of

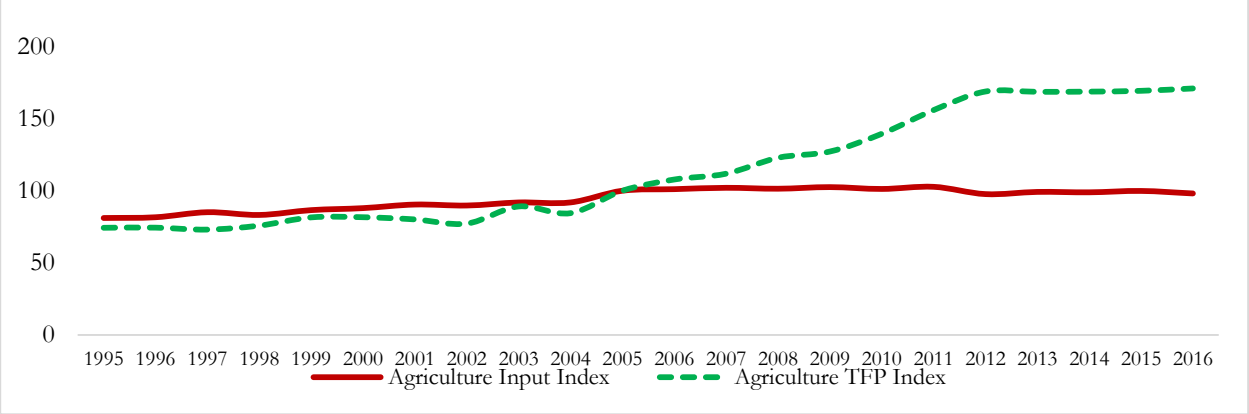
Figure 27: Comparison of Growth of Agriculture TFP by Country 1991-2014

4, by which 2/3 of this was contributed by the growth of total factor productivity.



Source: GFPR 2018

Figure 28: Trend of Cambodia's Agriculture Input Index and Agriculture TFP Index (2005=100)



Source: USDA

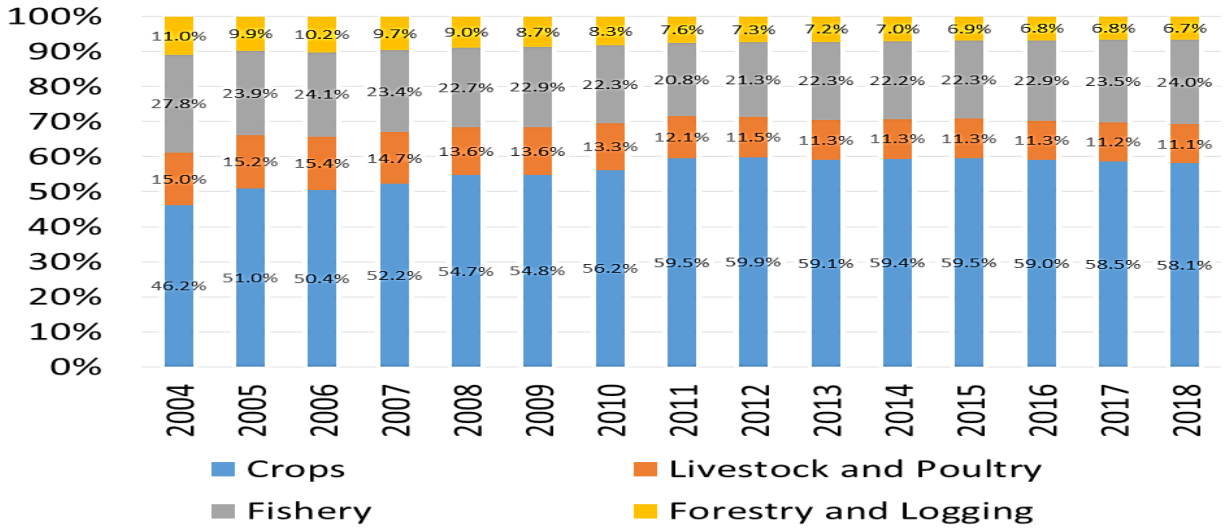
Slower growth of agriculture productivity under the constraint of limited expansion of cultivated area was one of the major reasons to cause slower growth of agriculture sector during 2013-2017. Based on consultation meeting with key stakeholders—government agencies, development partners, private sector, researchers and agriculture cooperatives in various provinces, slower growth of agriculture

productivity was associated with three main factors including: (1) limited access to water, (2) lack of R&D, and (3) lower effective and innovative farming technique.

Near zero growth of agriculture total factor productivity has been caused by: (1) inefficiency of agriculture mechanization resulting in loss during post-harvest up to 150 kg to 200 kg per hectare per annum which was equivalent to around USD 300 million per annum, (2) inappropriate use of agriculture inputs especially fertilizer, seeds and pesticides making farmers to bear with higher production cost and (3) lack of agriculture diversification by which the sector remained heavily depending on crops, especially rice while other potential sub-sectors have been still lagging behind.

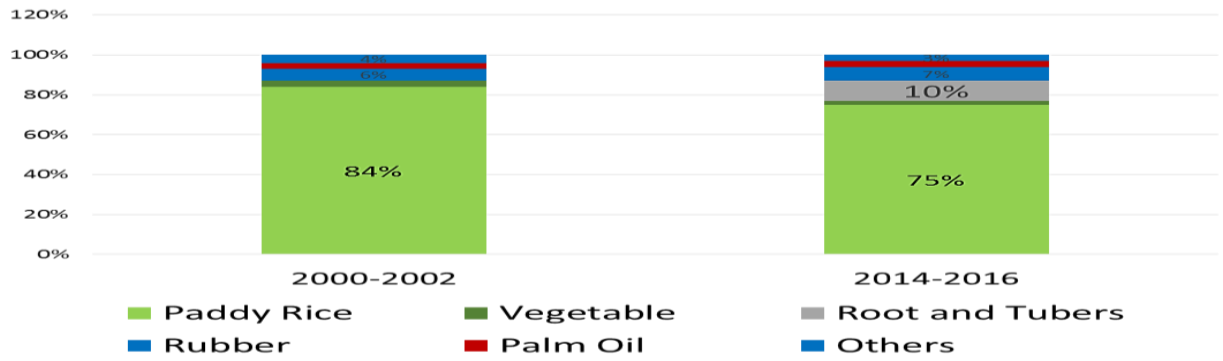
The pace of agriculture diversification remained slow despite some noted progress over the last decades. The graph below indicated that crops still constituted the largest share in agriculture sector—ranging between 55% and 58% while the other potential sub-sector such as livestock and poultry, and fishery constituted the small shares of around 11% and 22% respectively. Disaggregated crops by small sectors, the area of paddy rice production was shared of 75% during 2014-2016 while other combined small sub-sectors of crops shared only 25%.

Figure 29: Share of Agriculture Sub-Sectors



Source: NIS

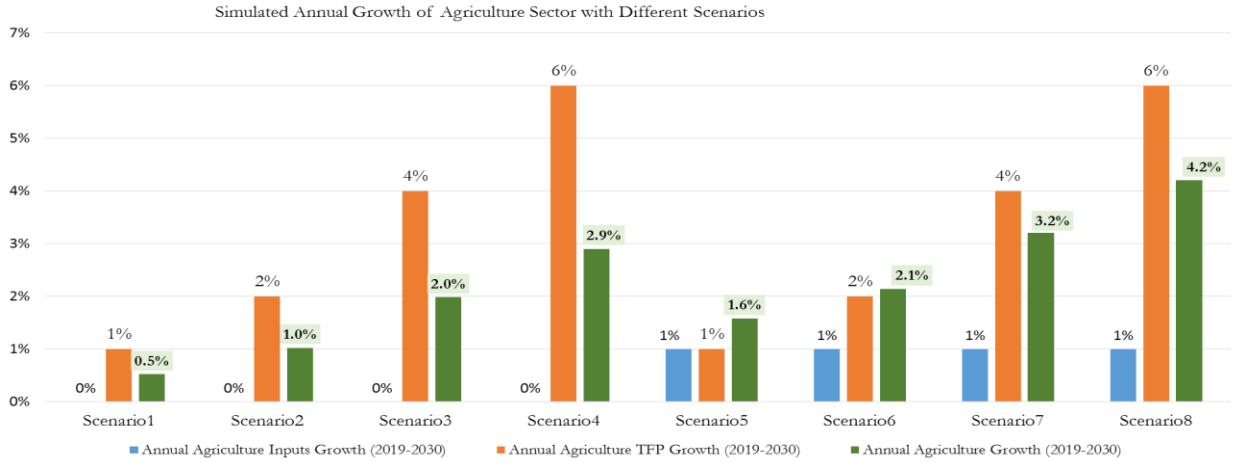
Figure 30: Share of Crops in Gross Cropped Area (2000-2002 and 2014-2016)



Source: IFPR

By analyzing the data of agriculture input index and total factor productivity index under the database of Economic Research Service Office of USDA, the annual agriculture growth could be calibrated under eight scenarios. **Scenario1-4:** assumed that there is no change of agriculture inputs index, but agriculture total factor productivity index changes by 1%, 2%, 4% and 6%, then agriculture sector could grow 0.5%, 1.0%, 2.0% and 2.9% per annum respectively during 2019-2030. **Scenario5-8:** assumed that the agriculture inputs index grow by 1.0% per annum and total factor productivity of agriculture index grows by 1.0%, 2%, 4%, and 6%, then agriculture sector grow 1.5%, 2.1%, 3.2% and 4.2% respectively during 2019-2030**.**

Figure 31: Simulated Annual Growth of Agriculture



Source: Simulated by Researcher by Utilizing Data from USDA, Economic Research Services Office

8. CONCLUSION AND POLICY RECOMMENDATIONS

8.1. Conclusion

Based on the analysis above, the findings from this study have shown that the public spending on agriculture sector over the last seven years (2011-2017) has generated positive impact on socio-economic development—significantly contributing to poverty reduction, improving food security (mostly in quantity rather than in quality and safety), enhanced agriculture commercialization, providing employment to people in the rural area, and helping people to be resilient to external shock, especially during financial and economic recession.

However, alongside the positive impact emerging from public spending, there have been some questions about efficiency of spending which has a big room for improvement. This has been reflected by the decelerating growth of agriculture sector mainly caused by near-zero growth of agriculture productivity and drop of foreign direct investment in agriculture over the past seven years (2011-2017) even though public spending kept increasing. Spending heavily concentrated on irrigation scheme—mostly large scales financed by various development partners' concessional loan and grants, which have not been comprehensively harmonized and inter-connected. Under this modality, only farmers whose paddy rice fields closed to the main canals could have benefited from the scheme. However, because of very limited small-scale irrigation scheme connected directly to their farms, farmers whose paddy rice fields which are located far away from the main scheme, have been struggling with water shortage.

Research and Development (R&D) has been playing an important role in boosting productivity and quality of agriculture product, however the budget allocated to this functionality has been quite small. Research and development in rice sector have been remarkably progressive, reflected by the continuous release of various fragrant seed varieties, and the outcome from this is also relatively good despite some room for improvement. However, R&D in other commodities is still in a small proportion—causing farmers to depend on using technologies and seeds of cashew, corn, cassava and others, fingerling and animal seeds imported from neighboring countries.

Not only that the spending on extension have been small, the effectiveness of delivering this to farmers have also remained questionable due to aforementioned reasons. In addition, spending in non-irrigation infrastructure is also in a small proportion. Based on simulation indicated above, to promote agriculture growth in the medium-long term up to 2030, it is imperative Cambodia

accelerates agriculture productivity, specifically total factor productivity (TFP). To absorb the improved quality and quantity of agriculture production, it is compulsory to boost agriculture commercialization and agro processing, by which private sector—local and international companies play an important roles to invest in this segment. Therefore, moving forward, Cambodia needs to increase efficiency of public spending at both allocation level and operational level—aimed at boosting overall agriculture productivity and creating attractive environment for private sector to invest in agro processing and enhance commercialization of agriculture product. The prioritized measures to achieve all above policy objectives are described in the part of Policy Recommendations below.

8.2. Policy Recommendations

Agriculture, which played an essential role in supporting socio-economic development in the last two decades, remains a key priority for Cambodia in medium and long term. The finding from this study, however, clearly showed that public spending has slightly contributed to support the agriculture output growth and economic growth as the whole. Under the context that Cambodia has already relieved from food insecurity, the strategic direction of public spending on agriculture sector in the medium and long term need to prioritize on investment which help boost agriculture growth.

Based on above findings and to accelerate the growth of this sector in medium and long terms and increase the efficiency of the public spending, some key strategic directions regarding to the public spending on agriculture that the RGC shall consider are as follows:

- **Increasing and rationalizing public spending on agriculture to encourage and facilitate the agriculture productivity, commercialization and diversification:** The key prioritized areas include: (a) gradually shifting to small scale irrigation schemes which connect to the medium and large scale schemes with the capacity development of farmers water user groups to manage and operate the scheme in a sustainable manner since irrigation schemes remain instrumental to the growth of the agriculture sector; (b) focusing on and encouraging investment in post-harvest facilities such as cooling room for vegetable, fruits, fish and meat, drying facilities, agriculture product distribution centers at the district levels, and packaging and cleaning equipment; (c) promoting and supporting R&D in good quality seeds of crops (fragrant rice, cashew, cassava, mango, red corn, rubber and other major fruits which are potential for export), fish, chicken, and pig. R &D needs to be market demand-driven and be co-financed by government's budget, development partners' fund and other contributions;

(d) focusing on the supply of good quality seeds and other important agricultural inputs so that farmers could have access the good quality and affordable inputs to boost the production yields; and (e) facilitating demand-driven extension services by strengthening the capacity and providing appropriate incentives to extension agents on the ground.

- **Enhancing the institutional coordination and harmonization at the planning and budgeting and implementation level.** To achieve this, the Ministry of Agriculture, Forestry, and Fishery (MAFF) needs to finalize the formulation and put into implementation the Agriculture Master Plan 2030, which serves as the main umbrella to harmonize and coordinate all projects and programs related to agriculture sector development.
- **Promoting the institutional capacity and gradual decentralization of resources.** It can be done in part by developing the technical capacity of government officials under both MAFF and MOWRAM in the aspects of large-scale project design and formulation, monitoring, and evaluation. To ensure the effective implementation of agriculture projects, it is vital the RGC speeds up the decentralization of human resources, financial resources, and some parts of authorities to provincial and district levels through appropriate incentive mechanisms.
- **Improving the agribusiness environment**: through (a) promoting sound agriculture business environment by improving trade facilitation which is related to law enforcement of economic land concession scheme, business registration, inspection, quality certification, enhancing fair playing field among local and foreign investors, accelerating the enforcement of contract farming between private companies and farmers or agriculture cooperatives so that they could ensure the stability of raw material supply; (b) considering to establish the Special Economic Zone or SME Cluster for Agro Processing based on the potential of respective regions. The potential clustering of the zones could be located in four regions—Region 1 (Battambang, Pailin, Banteay Meanchey); Region 2 (Kratie, Thbong Khmom, Steung Treng, Mundul Kiri and Rattanak Kiri), Region 3 (Kampot, Kampong Speu, Takeo and Koh Kong), Region 4 (Prey Veng, Kandal, Svay Rieng and Kampong Cham; (c) further reducing the cost of doing business by cutting the cost energy, improving the quality of infrastructure and connectivity, reducing logistics cost, and promoting affordable access to finance, especially for smallholder farmers; (d) establishing the agriculture loan programs which all farmers, small and medium agribusinesses could access the loan with the concessional rate; and (e) coordinating agribusinesses to participate in agriculture global value

chains through building up technical capacity, business matching platform, and agribusiness exhibitions.

ANNEX 1: LIST OF DOCUMENTS

	TYPE	TITLE
	Strategic Policies and Plans	- RGC (2018) Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase IV - RGC (2013) Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III - RGC (2018) National Strategic Development Plan: 2019 - 2023 - RGC (2013). National Strategic Development Plan: 2014 - 2018 - RGC (2015): Cambodia Industrial Development Policy: 2015 - 2025 - SNEC (2013). Cambodia Vision 2030 - RGC/NCCC (2013). Cambodia Climate Change Strategic Plan: 2014 - 2023 - MoE/NCGG (2013). National Strategic Plan on Green Growth: 2013 - 2030 - MAFF (2018). Budget Strategic Plan: 2018 - 2020 - MoH (2009). National Nutrition Strategy - MAFF (2015). Gender Mainstreaming Policy and Strategic Framework in Agriculture: 2016 - 2020 - CARD (2008). Strategic Framework for Food Security and Nutrition in Cambodia: 2008 - 2012 - MAFF (2015). Policy and Strategic Framework on Childhood Development and protection in the Agriculture Sector (2016 - 2020) - UNDP (2015) Sustainable Development Goals - RGC (2018) Cambodian Sustainable Development Goals Framework 2016-2030 - NCSD (2016). National Biodiversity and Strategy Action Plan. - MAFF (2015). Agricultural Extension Policy in Cambodia - SNEC (undated). Policy document on the promotion of paddy rice and milled rice for export
	Sectorial Planning Frameworks	- MAFF (2007). Strategy for Agriculture and Water: 2006 - 2010 - MAFF (2011). National Medium-Term Priority Framework: 2011 - 2015 - MAFF (2015). Agriculture Sector Strategic Development Plan: 2014 - 2028 - MAFF (20110. Strategic Framework for National Rubber Development: 2011 - 2020 - MAFF (2015). Strategic Planning Framework for Livestock Development: 2015 - 2024 - MAFF (2016). Strategic Planning Framework for Fisheries: updated for 2015 - 2024 - MAFF (2010). Strategic Planning Framework for Fisheries: 2010 - 2019 - MAFF (2017). National Strategic Plan for Aquaculture: 2016 - 2030 - MAFF (2010). National Forests Program: 2010 - 2029
	Master Plans	- MAFF (2017) Agriculture Sector Master Plan (draft) - MAFF (2016) Development of Master Plan for Crop Production in Cambodia by 2030 - MAFF (2015). MAFF action plan for the implementation of the Cambodian Industrial Development Policy: 2015 - 2025 - MAFF (2014). Climate change priorities action plan for agriculture, forestry and fisheries sector: 2014-2018 - MAFF (2005). Master Plan for Agricultural Research in Cambodia - KOICA/MAFF (2013). Master Plan for the Promotion of Agricultural

		Investment in Cambodia
	Other documents	- Cambodia Socio-Economic Survey (2017) - WB/AusAID (2015). Cambodian Agriculture in Transition. Opportunities and Risks - CCCA (2015). Planning and Budgeting for climate change in MAFF - MAFF/EU (2012). TA report: Cross cutting issues in the plans and budgets of MAFF - MAFF (2016). Gender Mainstreaming Action Plan in Agriculture: 2016 - 2020 - MAFF/D&DWG (2012). Functional mapping report of the MAFF (Decentralization and Deconcentration) - MAFF (2017). Annual Report for agriculture, forestry and fisheries 2016/17 and direction for 2017/18 - UN Regional Thematic WG on Poverty and Hunger in Asia and the Pacific (2013). The Zero Hunger challenge: Regional guiding framework for achieving zero hunger in Asia and the Pacific - GMS/CASP (2017). Strategy for promoting safe and environmentally-friendly agro-based value chains in the GMS sub-region and Siem Reap action plan: 2018 - 2022 - ASEAN (2015). Vision and strategic plan for ASEAN cooperation in food, agriculture and forestry: 2016 - 2025 - RGC/CARD (2016). National Action Plan for Zero Hunger Challenge in Cambodia (2016 - 2025) - CRRI (2015). Annual Technical Report 2014 - 2015 - MoC (2012). Rubber Sector Profile. Value Chain Unit, Trade Promotion Department, Ministry of Commerce. - MAFF/GDR (2016). Annual Report for 2016 and projections for 2017. - afD (2017). Feasibility Study for a Smallholder Rubber Development Project in Cambodia. GLG consultants. - FAO (2016). Review of poultry value chain in Cambodia and its associated risks for disease spread. - FAO (2016). Review of swine value chain in Cambodia and its associated risks for disease spread. - FAO (2014). Cattle value chain and social network analysis, Part 1 Cattle value chain - MAFF/Forestry Administration (2017). National Production Forestry Strategy 2018 - 2032 - MAFF/Forestry Administration (?). Cambodia's National Forest Program Background Document. - EU (2009). Assessment of initial implementation of the National Forest Program. - MoP/NIS (2015). Cambodia Socio-economic Survey 2014 - MoP/NIS (2016). Cambodia Socio-economic survey 2015 - World Bank (2017). Cambodia: Strategic Framework for the irrigation Sector - MOWRAM (2017). Outline of Master Plan on Water Resources of Cambodia, Brief Report on Preliminary Achievements. Changjiang Institute of Survey, Planning, Design and Research

ANNEX 2: LIST OF CONSULTATIONS & FIELDWORK

	Institutions	Description
	Public Sector	-Supreme National Economic Council -MAFF, ASPIRE Program and Various Agencies -Royal University of Agriculture -CARDI -Ministry of Industry and Handicraft (MIH) -Ministry of Rural Development. -Ministry of Economy and Finance (MEF) -Council for Development of Cambodia (CDC) -Ministry of Commerce (MOC) -Ministry of Environment -Ministry of Water Resource and Meteorology (MOWRAM) -National Bank of Cambodia (NBC) -Others
	Private Sector & Chamber of Commerce	-CP Co. Ltd -Amru Rice -Mong Reuthy Group -ACLEDA -Canadian Bank -Cambodia Chamber of Commerce, -Euro Cham, -Local and international agro-processors -Others
	Embassy	-Australian Embassy -The Embassy of the People's Republic of China
	Development Partners	-World Bank -UNDP -ADB -Delegation of European Union to Cambodia (EU) -UNDP -ADB -AFD -FAO, -USAID -Other others
	Farmers/Communities/Firms	-Contract Farmers with Amru Rice Co Ltd -Farmers Cooperatives - WFUG Water Farmer Use Groups -Cassava-processing Firm -Red Corn Farmers -Cashew nut-process Firm -Rice Seed Production Farmers -Sing Sung -Green Leader Co Ltd -Rice Millers -Livestock Farmers -Farmer Cooperatives -Marine Aquaculture Farmers -Mango Association -Farmers (Subsidiary and industrial Crops)

		-Others
	Researchers	-Center for Policy Studies -Independent Researchers -Others
	Field Work	-Phnom Penh -Pursat -Battambang -Kampong Thom -Kratie -Siem Reap

** របាយការណ៍សង្ខេប**

ការសិក្សាស្រាវជ្រាវគោលនយោបាយវិស័យកសិកម្មស្តីពី

"ការពិនិត្យឡើងវិញលើការវិនិយោគសាធារណៈក្នុងវិស័យកសិកម្មនៅកម្ពុជា"

អង្គភាពគ្រប់គ្រងគម្រោងស្រាវជ្រាវដើម្បីគាំទ្រការវិភាគវិស័យកសិកម្ម **(អគស)** ក្នុងក្របខណ្ឌ ASPIRE នៃឧត្តមក្រុមប្រឹក្សាសេដ្ឋកិច្ចជាតិ បានធ្វើការសិក្សាស្រាវជ្រាវលើគោលនយោបាយវិស័យកសិកម្មស្តីពី **"ការពិនិត្យឡើងវិញលើការវិនិយោគសាធារណៈក្នុងវិស័យកសិកម្មនៅកម្ពុជា"** ដែលបានចាប់ផ្តើមកាលពីខែ មិថុនា ឆ្នាំ ២០១៩ និង បានបញ្ចប់ជាស្ថាពរនៅខែ ឧសភា ឆ្នាំ ២០២០ ។ កិច្ចការនេះ, ក្រុមការងាររបស់ អគស បានសិក្សាស្រាវជ្រាវដោយមានកិច្ចសហការចូលរួមពីទីប្រឹក្សាជាតិ និង មន្ត្រីជំនាញរបស់អគ្គនាយកដ្ឋានគោល-នយោបាយ នៃក្រសួងសេដ្ឋកិច្ច និងហិរញ្ញវត្ថុ ។

ក្នុងកិច្ចដំណើរការអនុវត្តការងារ ក្រុមការងារបានចុះប្រឹក្សា និងពិគ្រោះយោបល់ដោយផ្ទាល់ ព្រមទាំងបានរៀបចំសិក្ខាសាលាចំនួនពីរលើកជាមួយភាគីពាក់ព័ន្ធ ដោយមានការចូលរួមពីក្រសួង-ស្ថាប័នរដ្ឋ, ដៃគូ-អភិវឌ្ឍន៍, អង្គការជាតិ-អន្តរជាតិ, ស្ថាប័នស្រាវជ្រាវ, ក្រុមហ៊ុនឯកជន, សហគមន៍កសិកម្ម, និងជំនាញការផ្សេងៗទៀត ផងដែរ ។ ការសិក្សាស្រាវជ្រាវនេះមានគោលបំណងសំខាន់ៗ ចំនួន ៤ គឺ÷ (១). ប៉ាន់ស្មានចំណាយសាធារណៈលើវិស័យកសិកម្មតាមអនុវិស័យកសិកម្ម និងតាមចំណាត់ថ្នាក់សេដ្ឋកិច្ច និងប្រភពហិរញ្ញ-ប្បទានចន្លោះ ឆ្នាំ ២០១១-២០១៧, (២). វាយតម្លៃផលវិជ្ជមាននៃការចំណាយសាធារណៈលើវិស័យកសិកម្ម, (៣). វាយតម្លៃប្រសិទ្ធភាពនៃការចំណាយសាធារណៈលើវិស័យកសិកម្ម និង (៤). កំណត់បញ្ហាប្រឈម និងផ្តល់អនុសាសន៍គោលនយោបាយ ដើម្បីបង្កើនប្រសិទ្ធភាពចំណាយសំដៅដល់ការជំរុញកំណើនវិស័យកសិកម្មក្នុងរយៈពេលមធ្យម និងរយៈពេលវែង ។

- **ការរួមចំណែករបស់វិស័យកសិកម្មក្នុងសេដ្ឋកិច្ច-សង្គម និងសន្តិសុខស្បៀងនាពេលអតីតកាល÷** ក្នុងចន្លោះឆ្នាំ ២០០៤-២០១០ វិស័យកសិកម្មសម្រេចបានកំណើនខ្ពស់ គួរឱ្យកត់សម្គាល់ក្នុងរង្វង់ ៥,៨% ក្នុងមួយឆ្នាំ និងបានរួមចំណែកយ៉ាងខ្លាំងក្នុងកំណើនសេដ្ឋកិច្ច និងការកាត់បន្ថយភាពក្រីក្រនៅកម្ពុជា ។ ជាក់ស្តែង វិស័យកសិកម្ម បានរួមចំណែកប្រមាណ ៦០% ក្នុងការកាត់បន្ថយភាពក្រីក្រពី ៥០% ក្នុងឆ្នាំ ២០០៧ មកត្រឹម ២១% ក្នុងឆ្នាំ ២០១១ និងបានធ្វើឱ្យស្ថានភាពសន្តិសុខស្បៀងនៅកម្ពុជាមានភាពល្អប្រសើរផងដែរ ។ ការីកចម្រើននៃវិស័យកសិកម្មក្នុងអំឡុងពេលនោះ ជាបច្ច័យបណ្តាលមកពីការកើនឡើងថ្លៃផលិតផលកសិកម្មនៅលើទីផ្សារអន្តរជាតិ, ភាពអំណោយផលនៃកត្តាអាកាសធាតុ និងការវិនិយោគសាធារណៈរបស់រាជរដ្ឋាភិបាលលើហេដ្ឋា-រចនាសម្ព័ន្ធគាំទ្រ ជាពិសេសប្រព័ន្ធធារាសាស្ត្រ ដែលបានជំរុញធ្វើឱ្យប្រជាកសិករបង្កើនផ្ទៃដីដាំដុះ និងផលិតកម្មដំណាំ ជាពិសេសដំណាំស្រូវ ។
- **ស្ថានភាពនៃវិស័យកសិកម្មក្នុងរយៈពេលប៉ុន្មានឆ្នាំចុងក្រោយ÷** ក្នុងរយៈពេលប៉ុន្មានឆ្នាំចុងក្រោយនេះ (ឆ្នាំ ២០១១-២០១៧) វិស័យកសិកម្មមានកំណើនទាបក្នុងរង្វង់ ១,៨% ក្នុងមួយឆ្នាំ និងត្រឹម ១,០% ប៉ុណ្ណោះក្នុង

រយៈពេលពីរបីឆ្នាំចុងក្រោយនេះ ធៀបនឹងកំណើន ៥,៨% ក្នុងចន្លោះឆ្នាំ ២០០៤-២០១០ ។ ជាមួយនឹងអត្រាកំណើនទាប គួបផ្សំនឹងការប្រែប្រួលរចនាសម្ព័ន្ធសេដ្ឋកិច្ចផងនោះ វិស័យកសិកម្មកាន់តែចូលរួមចំណែកតិចតួចក្នុងកំណើនសេដ្ឋកិច្ច ពោលគឺក្នុងរង្វង់ ០,៣% ប៉ុណ្ណោះក្នុងអត្រាកំណើនសេដ្ឋកិច្ចមធ្យមជាង ៧,០% ក្នុងមួយឆ្នាំក្នុងរយៈពេលជិតមួយទសវត្សរ៍ចុងក្រោយនេះ ។

- **ចំណាយសាធារណៈក្នុងវិស័យកសិកម្ម÷** លទ្ធផលនៃការសិក្សាស្រាវជ្រាវបានបង្ហាញថា ក្នុងចន្លោះឆ្នាំ ២០១១-២០១៧ ចំណាយសាធារណៈលើវិស័យកសិកម្មស្ថិតក្នុងរង្វង់ ២៧២,៦ លានដុល្លារ ជាមធ្យមក្នុងមួយឆ្នាំ ឬ ១,៦% នៃផ.ស.ស ដែលក្នុងនោះ ៣៥% ត្រូវបានផ្តល់ហិរញ្ញប្បទានដោយថវិការដ្ឋ និង ៦៥% ត្រូវបានផ្តល់ហិរញ្ញប្បទានដោយថវិកាដៃគូ (ទាំងកម្ចីសម្បទាន និងជំនួយឥតសំណង) ។ ជាមួយគ្នានេះដែរ ក្នុងអំឡុងឆ្នាំ ២០១១-២០១៧ ការចំណាយសាធារណៈលើវិស័យកសិកម្ម (មិនរាប់បញ្ចូលចំណាយបន្ទុកបុគ្គលិក) ត្រូវបានបង្កើន ១,៥២ ដង ។ បើញែកតាមអនុវិស័យ, ការចំណាយសាធារណៈលើអនុវិស័យដំណាំមានប្រមាណ ៧៤,៨% នៃចំណាយសរុប ខណៈដែលអនុវិស័យនេសាទ និងចិញ្ចឹមសត្វមានត្រឹម ៣,៣% និង ២,០% រៀងគ្នានៃចំណាយសរុប ។ ប្រសិនបើញែកតាមចំណាត់ថ្នាក់សេដ្ឋកិច្ច, ការចំណាយលើហេដ្ឋារចនាសម្ព័ន្ធធារាសាស្ត្រ (ភាគច្រើនខ្នាតធំ) មានប្រមាណ ៦០% នៃចំណាយសាធារណៈសរុប ខណៈដែលការចំណាយលើការផ្សព្វផ្សាយកសិកម្មមាន ៥,៨% និងការស្រាវជ្រាវ និងការអភិវឌ្ឍដែលជាអាទិភាពសំខាន់ត្រូវបានចំណាយក្នុងរង្វង់ ១,០% ប៉ុណ្ណោះ ។

- **ប្រសិទ្ធភាពចំណាយសាធារណៈលើវិស័យកសិកម្ម÷** ទោះបីជាពុំមានទ្រឹស្តី ឬ ឧបករណ៍ជាក់លាក់ដើម្បីធ្វើការវាយតម្លៃអំពីប្រសិទ្ធភាពនៃចំណាយសាធារណៈ, ដោយសារទិសដៅផ្ទុយគ្នារវាងចំណាយសាធារណៈលើវិស័យកសិកម្មដែលមានការកើនឡើង និងអត្រាកំណើននៃវិស័យនេះដែលមាននិន្នាការថយចុះ, ប្រសិទ្ធភាពចំណាយអាចជាបញ្ហាប្រឈមដ៏សំខាន់មួយ ដែលរឹតត្បិតការអភិវឌ្ឍវិស័យកសិកម្មក្នុងរយៈពេលប៉ុន្មានឆ្នាំចុងក្រោយនេះ ក្រៅពីកត្តាធម្មជាតិ និងការប្រែប្រួលថ្លៃនៃផលិតផលកសិកម្ម ។ លទ្ធផលនៃការសិក្សាស្រាវជ្រាវបានបង្ហាញថា ក្នុងរយៈពេលប៉ុន្មានឆ្នាំចុងក្រោយនេះ កំណើនផលិតភាពកសិកម្ម ទាំងផលិតភាពកម្លាំងពលកម្ម និងផលិតភាពដីមានការថមថយជាលំដាប់ ខណៈដែលការធ្វើពិពិធកម្មកសិកម្ម និងការធ្វើពាណិជ្ជបនីយកម្មកសិកម្មនៅតែមានកម្រិតទាបនៅឡើយ ដែលកត្តាទាំងនេះជាមូលហេតុចម្បងបណ្តាលឱ្យវិស័យកសិកម្មនៅតែបន្តកំណើនទាបក្នុងរយៈពេលជិតមួយទសវត្សរ៍ចុងក្រោយនេះ ។ ការណ៍នេះជាបច្ច័យនៃការវិភាជថវិកាពុំទាន់មានតុល្យភាពក្នុងចំណោមមុខសញ្ញាចំណាយ ដែលជាអាទិភាពក្នុងវិស័យកសិកម្ម ពោលការវិភាជកន្លងមកផ្តល់ទម្ងន់ខ្លាំងលើការសាងសង់ប្រព័ន្ធធារាសាស្ត្រ (ភាគច្រើនប្រព័ន្ធប្រឡាយមេ) ដែលស្រូបយករហូតដល់ ៦០% ចំណាយសរុប ខណៈដែលសកម្មភាពអាទិភាពផ្សេងទៀត ដូចជា ការផ្សព្វផ្សាយបច្ចេកទេសកសិកម្មបែបទំនើប, ការស្រាវជ្រាវ និងការអភិវឌ្ឍ, ការអភិវឌ្ឍ និងផលិតពូជដំណាំ សត្វ និងត្រី ដែលមានគុណភាព, ហេដ្ឋារចនាសម្ព័ន្ធគាំទ្រក្រោយពេលប្រមូលផល ដូចជាបន្ទប់ក្លាសេផលិតផលកសិកម្ម ឧបករណ៍លាងសម្អាត

វេចខ្ចប់ និងមជ្ឈមណ្ឌលចែកចាយផលិតផលកសិកម្មជាដើម ទទួលបានការគាំទ្រតិចតួចនៅឡើយ ។ ជាមួយគ្នានេះដែរ កំណើនទាបនៃវិស័យកសិកម្មមិនត្រឹមតែបណ្តាលមកពីភាពមានកម្រិតនៃប្រសិទ្ធភាពចំណាយសាធារណៈ ជាពិសេសក្នុងកម្រិតវិភាជប៉ុណ្ណោះទេ ប៉ុន្តែក៏បណ្តាលមកពីកង្វះការសម្របសម្រួលស្ថាប័ន និងសុខដុមនីយកម្ម ទាំងក្នុងកម្រិតនៃការធ្វើផែនការ ការរៀបចំថវិកា និងការអនុវត្តក្នុងចំណោមតួអង្គសំខាន់ៗ ដោយរាប់បញ្ចូលទាំងស្ថាប័នរដ្ឋ និងដៃគូអភិវឌ្ឍន៍ ពោលការអនុវត្តការងារមានលក្ខណៈដាច់ដោយឡែកៗពីគ្នា និងផ្តែកតាមគម្រោងនីមួយៗ ។ បន្ថែមពីនេះ ភាពមានកម្រិតនៃការបង្កើតបរិយាកាសអំណោយផលសម្រាប់កសិធុរកិច្ច ដើម្បីធ្វើការវិនិយោគក្នុងដំណាក់កាលនីមួយៗនៃច្រវាក់តម្លៃកសិកម្ម ដោយរាប់ចាប់ពីការដាំដុះរហូតដល់ការកែច្នៃ និងការនាំចេញនៅតែជាបញ្ហាប្រឈមដែលត្រូវដោះស្រាយជាចាំបាច់ និងបន្ទាន់ ។

ដើម្បីជំរុញវិស័យកសិកម្មឱ្យមានកំណើនខ្ពស់សំដៅទ្រទ្រង់សេដ្ឋកិច្ចជាតិ, កាត់បន្ថយភាពក្រីក្រ និងរក្សាសន្តិសុខស្បៀង ទាំងក្នុងរយៈពេលមធ្យម និងវែង រាជរដ្ឋាភិបាលគួរពិចារណាលើចំណុចសំខាន់ៗដូចខាងក្រោម÷

(១). បង្វែរអាទិភាពពីការវិនិយោគលើការសាងសង់ប្រព័ន្ធធារាសាស្ត្រខ្នាតធំ ទៅខ្នាតមធ្យម និងតូច (ប្រឡាយជើងភ្នែប) និងអភិវឌ្ឍសមត្ថភាពក្រុមកសិករប្រើប្រាស់ទឹក និងគ្រប់គ្រងប្រព័ន្ធធារាសាស្ត្រដែលសាងសង់រួចប្រកបដោយនិរន្តរភាព ។

(២). បង្កើនចំណាយសាធារណៈបន្ថែមទៀតលើហេដ្ឋារចនាសម្ព័ន្ធ ដែលគាំទ្រសម្រាប់ដំណាក់កាលក្រោយពេលប្រមូលផលដូចជា បន្ទប់ត្រជាក់សម្រាប់ក្លាសេបន្លែ ត្រី សាច់ និងផ្លែឈើ ឡសម្ងួត គួរត្រូវបានធ្វើឱ្យប្រសើរឡើងសម្រាប់ប្រើប្រាស់នៅមជ្ឈមណ្ឌលចែកចាយផលិតផលកសិកម្មក្នុងស្រុក ព្រមទាំងធ្វើឱ្យប្រសើរឡើងនូវខុប-ករណ៍វេចខ្ចប់ និងសម្អាតជាដើម ។

(៣). ជំរុញបន្ថែមលើការស្រាវជ្រាវ និងការអភិវឌ្ឍលើពូជសុទ្ធដែលមានគុណភាពល្អសម្រាប់ប្រភេទដំណាំសក្តានុពលសំខាន់ៗ ដូចជា ពូជស្រូវក្រអូប ស្វាយចន្ទី ដំឡូងមី ស្វាយ ពោតក្រហម កៅស៊ូ និងផ្លែឈើហូបផ្លែ ពូជត្រី មាន់ និងជ្រូកជាដើម ។ ការស្រាវជ្រាវ និងការអភិវឌ្ឍអាចធ្វើឡើងដោយផ្តែកលើតម្រូវការទីផ្សារ និងសហហិរញ្ញប្បទាន ដោយថវិការដ្ឋ ដៃគូអភិវឌ្ឍន៍ និងភាគីពាក់ព័ន្ធផ្សេងទៀត ។

(៤). ជំរុញការផ្គត់ផ្គង់ពូជសុទ្ធដែលមានគុណភាពល្អ និងធាតុចូលកសិកម្មផ្សេងទៀតក្នុងកម្រិតថ្លៃសមស្របដល់កសិករ និងកសិពាណិជ្ជករសំដៅបង្កើនទិន្នផលកសិកម្ម និងជំរុញការផ្សព្វផ្សាយបច្ចេកទេសកសិកម្មដែលផ្តែកលើតម្រូវការទីផ្សារ តាមរយៈការពង្រឹងសមត្ថភាព និងអនុវត្តយន្តការលើកទឹកចិត្តសមស្របដល់ភ្នាក់ងារផ្សព្វផ្សាយកសិកម្មដែលអនុវត្តការងារនៅថ្នាក់មូលដ្ឋាន ។

(៥). ធ្វើឱ្យប្រសើរឡើងនូវការសម្របសម្រួលស្ថាប័ន និងសុខដុមនីយកម្ម ទាំងក្នុងកម្រិតនៃការធ្វើផែនការការរៀបចំថវិកា និងកម្រិតនៃការអនុវត្ត ។ ដើម្បីសម្រេចគោលដៅនេះ ក្រសួងកសិកម្ម រុក្ខាប្រមាញ់ និងនេសាទ ចាំបាច់ត្រូវបញ្ចប់ការរៀបចំផែនការមេអភិវឌ្ឍវិស័យកសិកម្មឆ្នាំ ២០៣០ និងអនុវត្តប្រកបដោយ

ប្រសិទ្ធភាពខ្ពស់ ។ ផែនការមេនេះនឹងដើរតួនាទីយ៉ាងសំខាន់ក្នុងការធ្វើសុខដុមនីយកម្ម និងសម្របសម្រួលគម្រោង ព្រមទាំងកម្មវិធីទាំងអស់ដែលពាក់ព័ន្ធនឹងការអភិវឌ្ឍវិស័យកសិកម្មកម្ពុជា ។

(៦). ធ្វើឱ្យប្រសើរឡើងនូវបរិយាកាសកសិធុរកិច្ច តាមរយៈការពង្រឹងការអនុវត្តច្បាប់ស្តីពីដីសម្បទានសេដ្ឋកិច្ច, ការចុះបញ្ជីក្រុមហ៊ុន, ការធ្វើអធិការកិច្ច, ការបញ្ជាក់គុណភាព, ការធ្វើឱ្យប្រសើរឡើងនូវការប្រកួត-ប្រជែងដោយស្មើភាព ក្នុងចំណោមវិនិយោគិនក្នុងស្រុក និងបរទេស ព្រមទាំងការជំរុញការអនុវត្តកសិកម្មតាមកិច្ចសន្យាជាដើម ។ ទន្ទឹមនេះ រាជរដ្ឋាភិបាលគួរផ្តួចផ្តើមក្នុងការបង្កើតឱ្យបាននូវបណ្តុំសហគ្រាសធុនតូច និងមធ្យមសម្រាប់វិស័យកសិ-ឧស្សាហកម្ម ដោយផ្អែកលើសក្តានុពលនៃផលិតផលកសិកម្ម ក្នុងតំបន់នីមួយៗ និងជាពិសេសកាត់បន្ថយថ្លៃដើមនៃការធ្វើកសិធុរកិច្ច រួមមានការកែច្នៃផលិតផលកសិកម្ម ជាដើម ។ បន្ថែមលើនេះ ការបង្កើតឱ្យមានកម្មវិធីឥណទានកសិកម្មពិសេសនឹងជួយសម្រួលឱ្យកសិករ និងកសិពាណិជ្ជករខ្នាតតូច និងមធ្យមអាច ទទួលបានហិរញ្ញប្បទានក្នុងអត្រាការប្រាក់សម្បទាន និងសម្របសម្រួលឱ្យក្រុមហ៊ុនកសិធុរកិច្ចក្នុងស្រុកចូលរួមកាន់តែខ្លាំងជាងមុនក្នុងច្រវាក់តម្លៃកសិកម្ម ទាំងក្នុងកម្រិតតំបន់ និងសកល ។