

# **JOBS AND LABOR PRODUCTIVITY IN CAMBODIA'S AGRICULTURE SECTOR**

**6<sup>th</sup> Annual NBC  
macroeconomic conference  
“the agriculture sector in a  
rapid structural transformation  
and uncertain global trade  
environment”**

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# CAMBODIA'S AGRICULTURE SECTOR – AN OVERVIEW



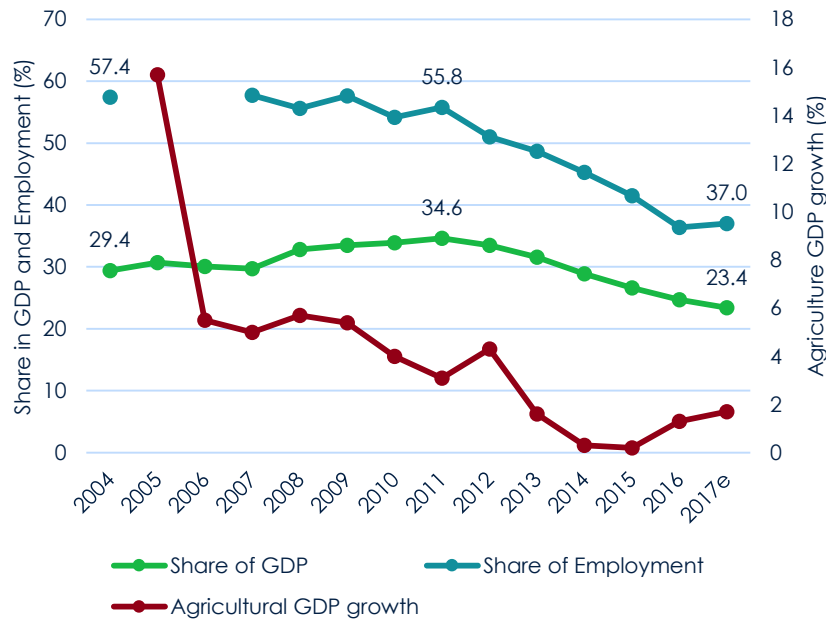
Past agricultural growth was driven largely by open trade and market-oriented agricultural policy. However, with global food prices declining and the land frontier diminishing, Cambodian agriculture is decelerating. Agricultural labor is becoming scarcer and more expensive (the agriculture sector shed more than a million jobs between 2009-17), adding to production costs.

Selling low-quality ordinary rice on domestic and foreign markets will be less and less profitable. Rural outmigration and employment growth in the services, manufacturing, and construction sectors have now contributed to in large part to poverty reduction.

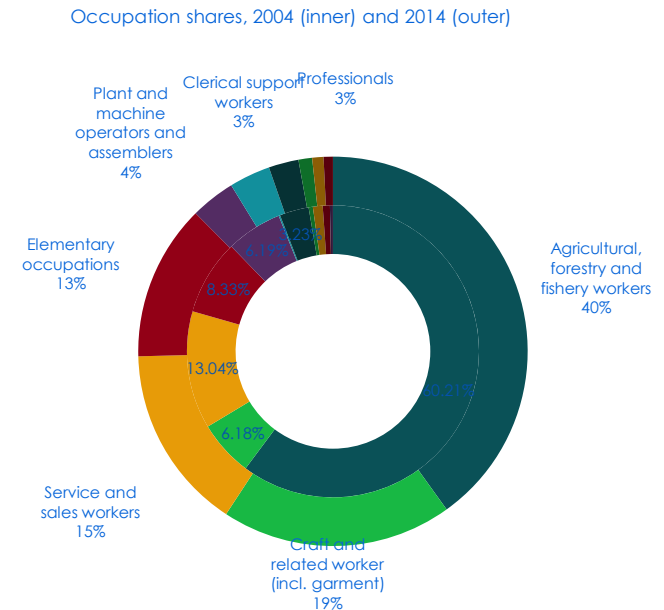
Agriculture employment, largely in monocrop rice cultivation, is characterized by low incomes, underemployment, and high vulnerability to climate risks and market price fluctuations.

# STRUCTURAL TRANSFORMATION OUT OF AGRICULTURE, BUT A LARGE SHARE OF WORKERS REMAINED IN LOW QUALITY JOBS'

**Agricultural GDP growth has slowed since 2012, and the share in employment and GDP has declined**



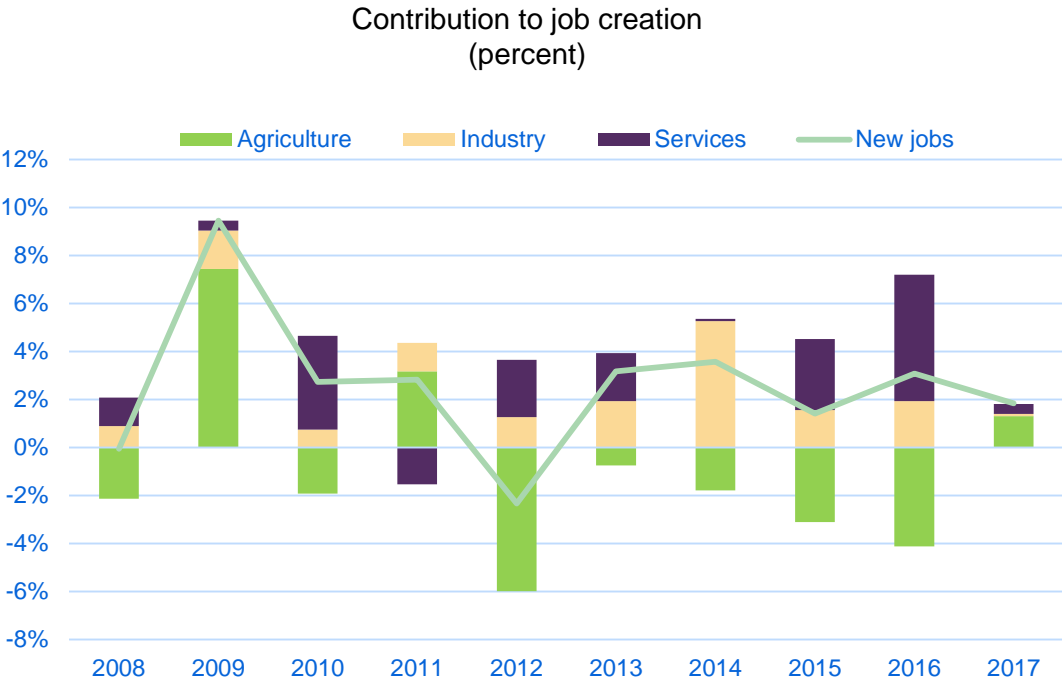
**While in decline, more than half of the workforce were still employed in poor-quality jobs in 2014**



**Source:** Cambodia Economic Diversification Study  
*Fostering diversification, value chain participation, and upgrading*, June, 2019.

# WHILE TRENDING DOWNWARD, JOBS IN AGRICULTURE FLUCTUATES DUE TO UNEVEN PERFORMANCE OF THE SECTOR

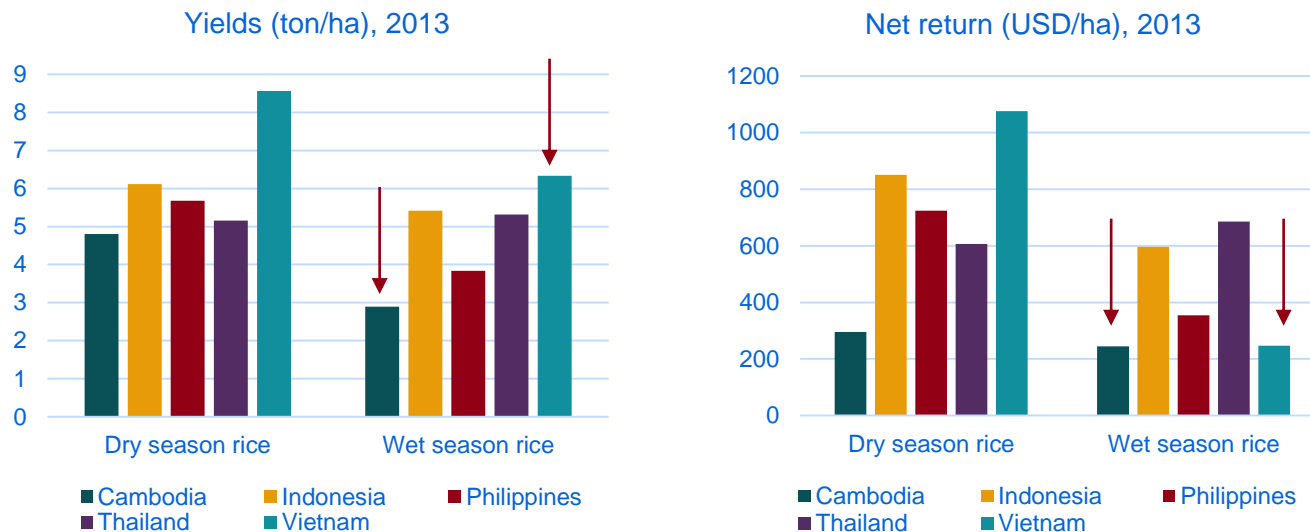
While trending downward, jobs in agriculture increased during the 2008/09 global financial crisis but decreased as the sector performance worsened in 2014-15 due to droughts



Source: CSES.

# RICE YIELDS HAVE IMPROVED BUT WITH LOW RETURNS

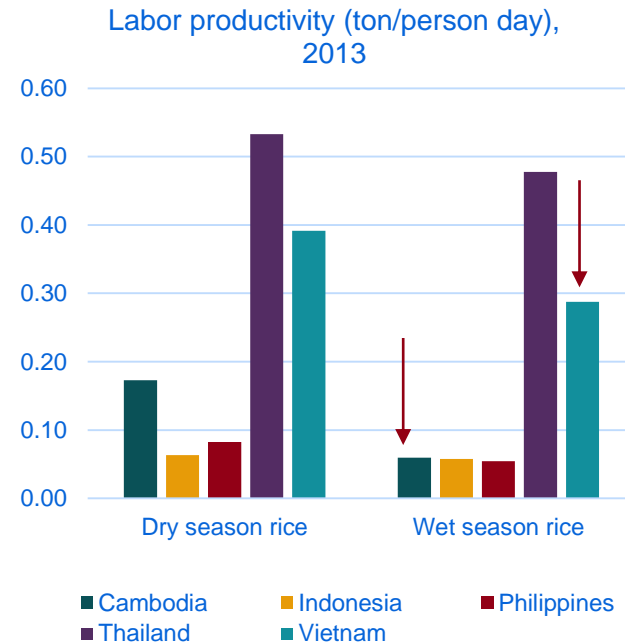
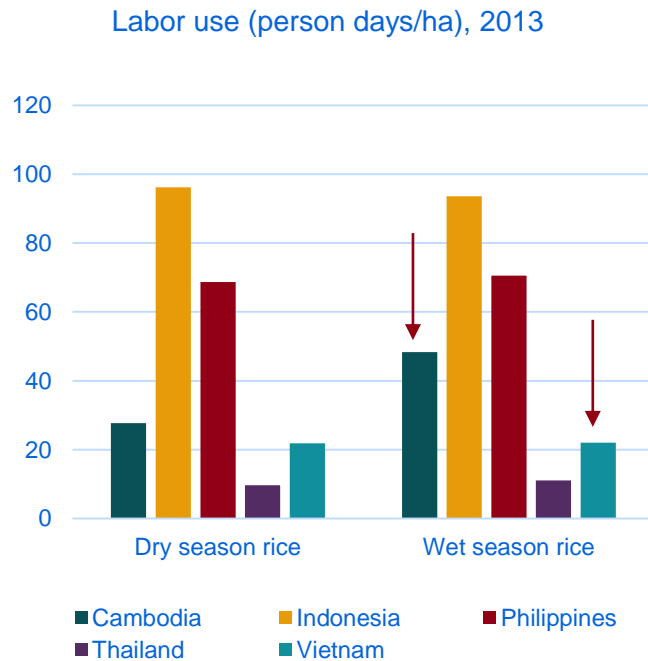
While Cambodian rice yields have caught up, net returns remain below peer countries



Source: Cambodia Economic Diversification Study  
*Fostering diversification, value chain participation, and upgrading*, June, 2019.

# AGRICULTURE LABOR PRODUCTIVITY REMAINED RELATIVELY LOW

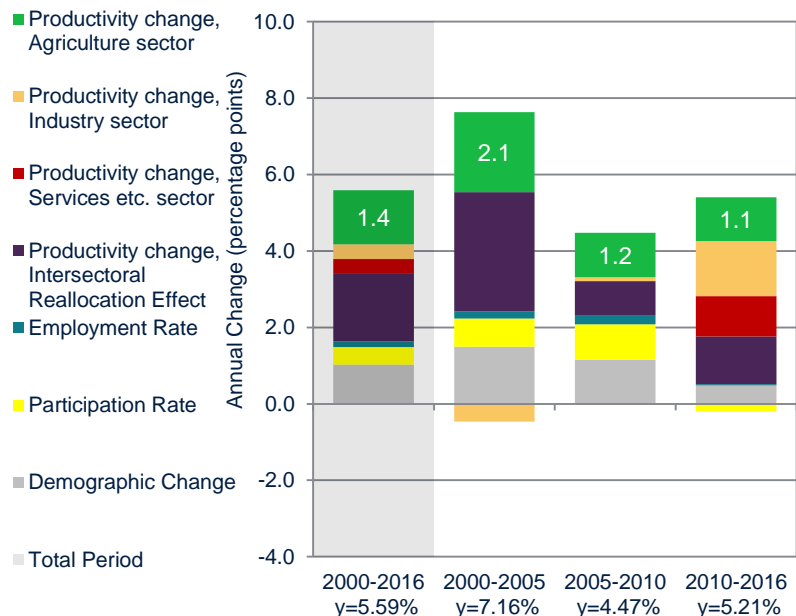
Cambodia's labor use falls between labor-intensive and capital-intensive peers, while its labor productivity is relatively low



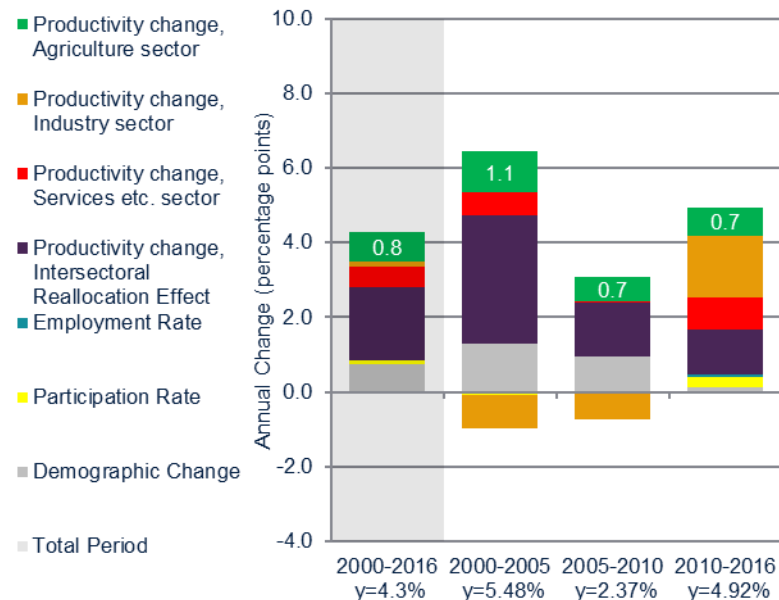
Source: Cambodia Economic Diversification Study  
*Fostering diversification, value chain participation, and upgrading*, June, 2019.

# IMPROVEMENTS IN AGRICULTURE PRODUCTIVITY PLAYED A MAJOR ROLE IN ECONOMIC TRANSFORMATION

**Cambodia: Shapley decomposition of per capita Value Added growth, productivity (value added per worker) by Major sector**



**Vietnam: Shapley decomposition of per capita Value Added growth, productivity (value added per worker) by Major sector**

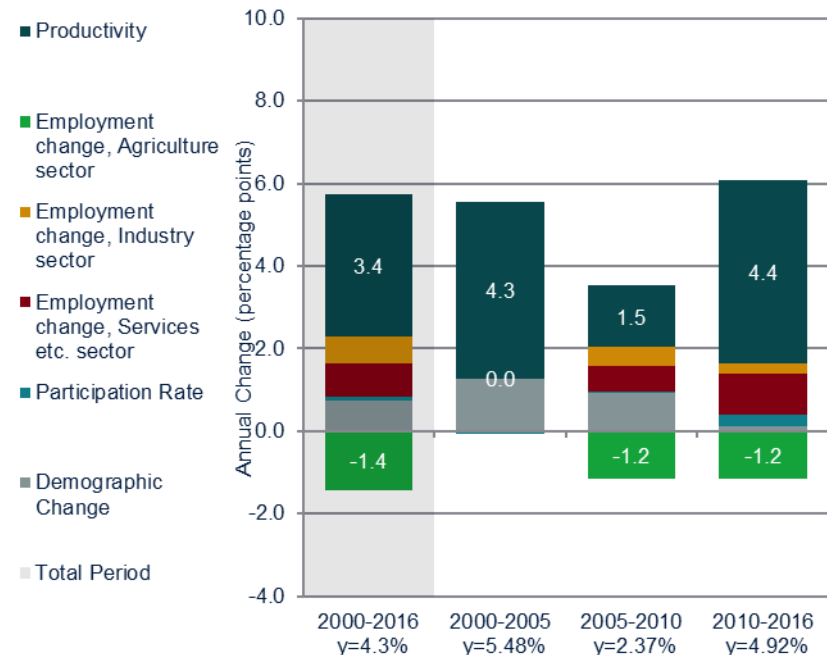
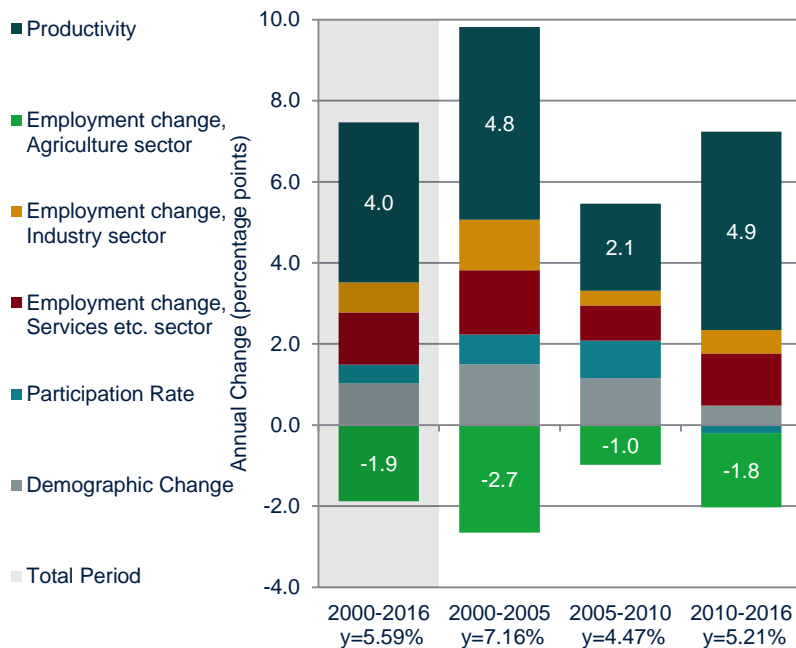


Source: Per capital value added (output) growth decomposition (by Shapley), the World Bank.  
 y = Annual Growth per capita Value Added (Percent)

# PRODUCTIVITY (VALUE ADDED PER WORKER) ROSE ECONOMIC TRANSFORMATION ACCELERATED

**Cambodia: Shapley decomposition of change in employment rate, by Major sector**

**Vietnam: Shapley decomposition of change in employment rate, by Major sector**

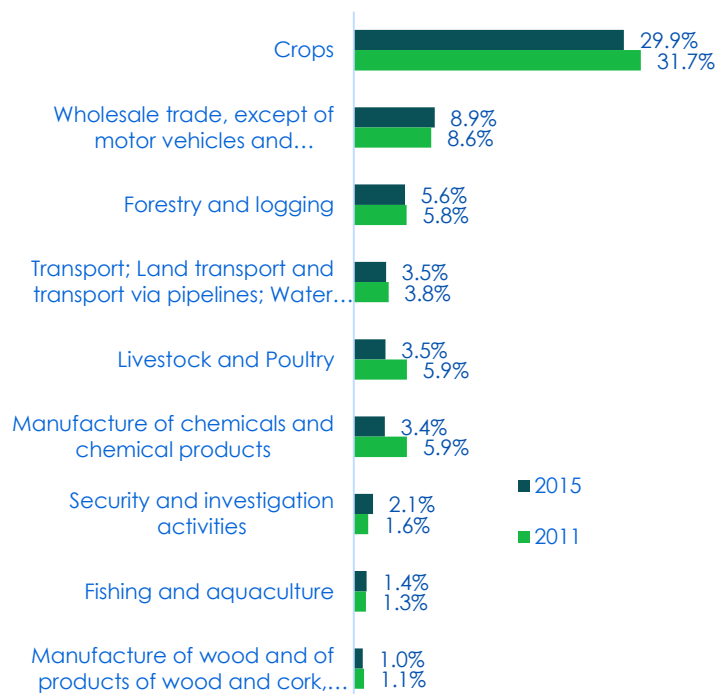


Source: Per capita value added (output) growth decomposition (by Shapley), the World Bank.  
y = Annual Growth per capita Value Added (Percent)

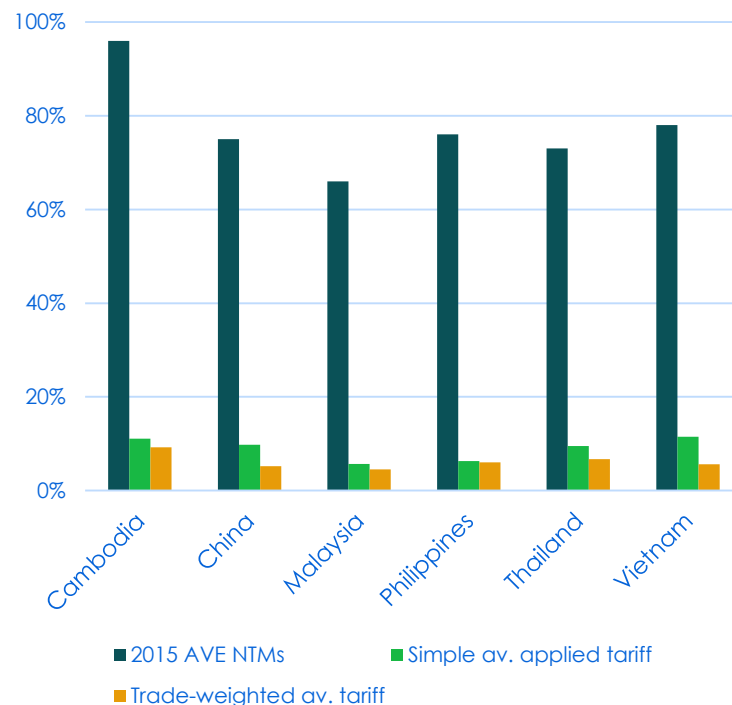


# FURTHER IMPROVEMENTS IN THE USE OF INPUTS REMAINED

The agriculture sector relies on domestic inputs from the same sector, preventing increase in product values



Cambodian NTMs' ad valorem equivalent (AVEs) are the highest in the region



Source: Cambodia Economic Diversification Study  
*Fostering diversification, value chain participation, and upgrading*, June, 2019.  
 Note: AVEs = ad valorem equivalent and av. = average

# CHALLENGES AND POLICY OPTIONS

Many farmers cannot grow dry season rice or other multi-cropping alternatives due to lack of water and irrigation for dry season cultivation. Low labor productivity played a role in keeping net returns below competitor countries.

Improvements in agricultural land or capital can further boost labor productivity. A rise in **farm productivity** (the shift from traditional to modern technologies is accompanied by higher efficiency of modern input use and irrigation) **would have the largest positive effect on farm incomes. So, facilitating improved access to inputs and extensions services is key.**

A 2016 study undertaken by the World Bank Group in Ghana, Kenya, and Zambia found that farmers who were on a contract (value chain participation) saw greater structural transformation; higher output; and better access to seeds, fertilizers, pesticides, **technology, and extension services.** (<http://documents.worldbank.org/curated/en/625351530882059462/How-does-participation-in-value-chains-matter-to-African-farmers>)

Focusing high value addition, for instance, producing fragrant rice, processing cassava into dry chips, and undertaking other value addition activities can further increase their incomes, illustrating the importance of the agroprocessing industry.

Lowering production costs through better (more appropriate) use of existing resources (capital and labor) and minimizing drops in farm output prices through lower logistics costs -- the keys to maintaining farm competitiveness.

**Thank you!**

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# ANNEX: IMPACTS OF LOWER AGRICULTURE GROWTH

**Table 1: Impact of lower agricultural growth on selected agriculture sector indicators, Cambodia**

Indicators	2012	2030	
		3% Ag GDP growth	5% Ag GDP growth
Share of agriculture in GDP, %	26	15	17
Share of agriculture in labor force, %	51	34	31
Agricultural labor productivity, \$/person	1,200	2,450	3,700
Agricultural land productivity, \$/ha	1,300	1,900	2,700
Labor productivity ratio of agricultural to nonagricultural workers	2.1	2.1	1.6

Source: CAMBODIAN AGRICULTURE IN TRANSITION: OPPORTUNITIES AND RISKS, June 2015, the World Bank.