

# FAO Medium-Term Projections

## Medium-term impact of policy reforms in the Chinese grain sector: simulation results from the Aglink-Cosimo model

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Medium-term Outlook and Market Analysis

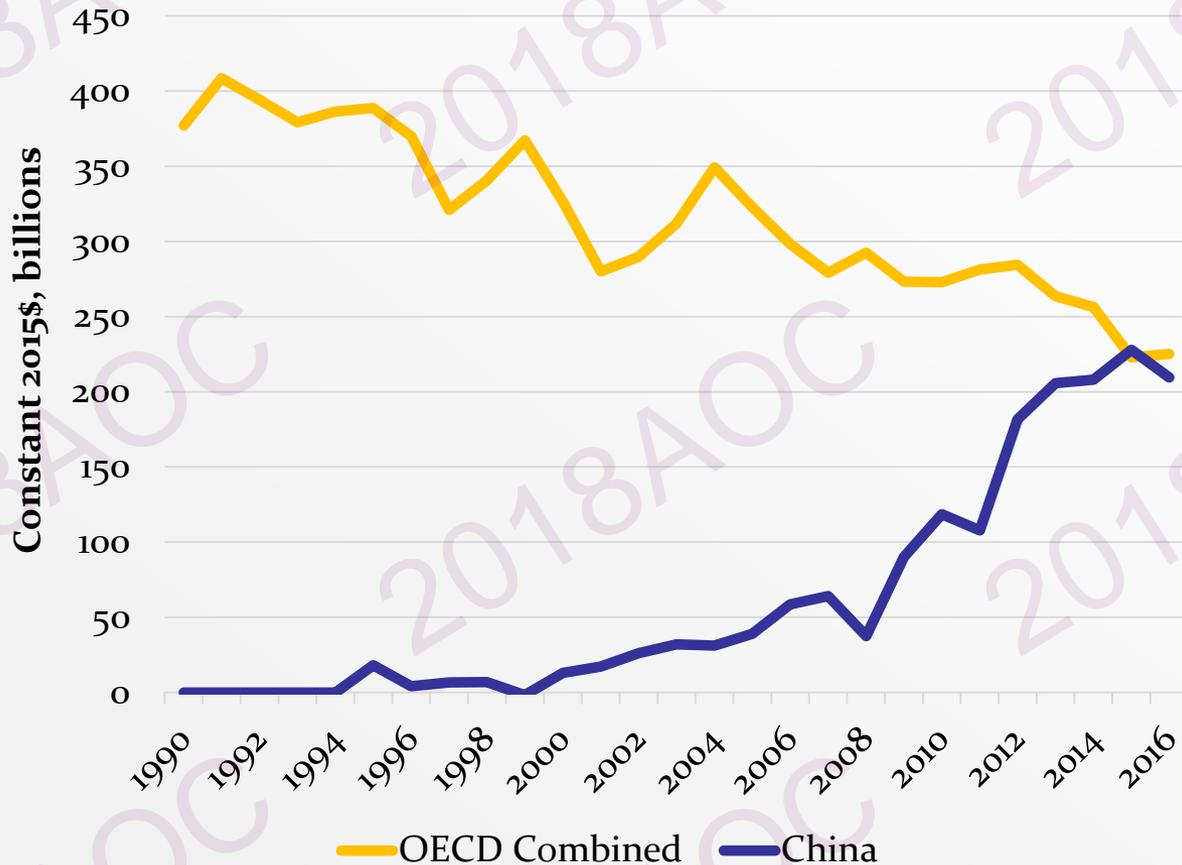
*Trade and Markets Division (EST)*

# Forward looking analyses



- Forward-looking policy and market analyses to support evidence-based policymaking
- Promote and foster a model-based dialogue on global prospects for food and agriculture between stakeholders and FAO

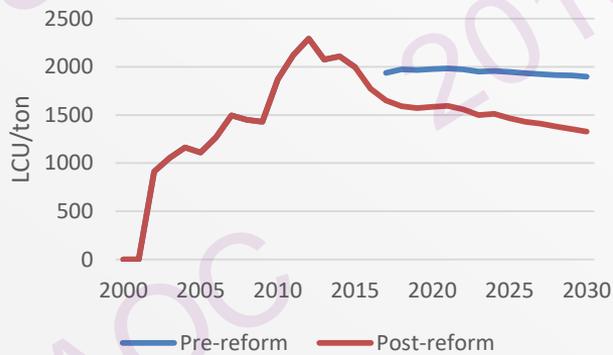
# Chinese agricultural policies



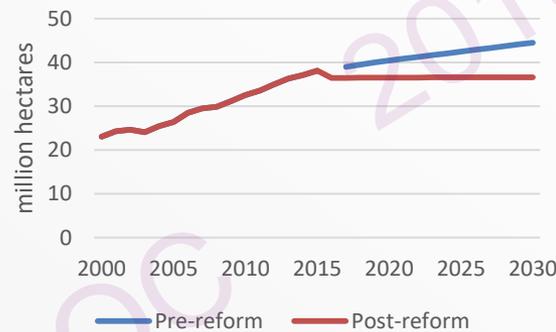
- Policy measures aimed to ensure domestic food security.
- Main instruments are procurement prices, a temporary reserve system for maize, wheat and rice and respective TRQs.
- Chinese agricultural subsidies (TSE) now equal those of all OECD countries combined.
- Policy reforms in the maize market are already in effect, further steps in rice and wheat markets are expected.

# Maize market policy reform – China market projections

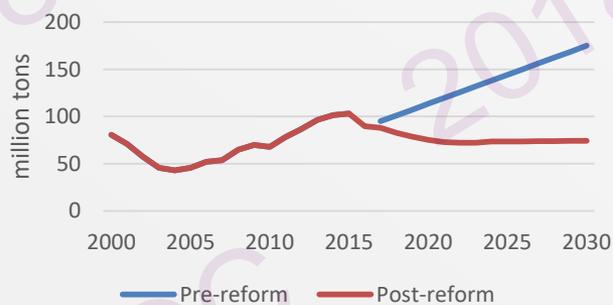
Domestic maize price



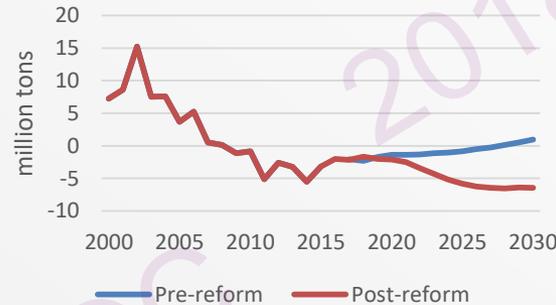
Domestic maize area



Domestic maize stocks



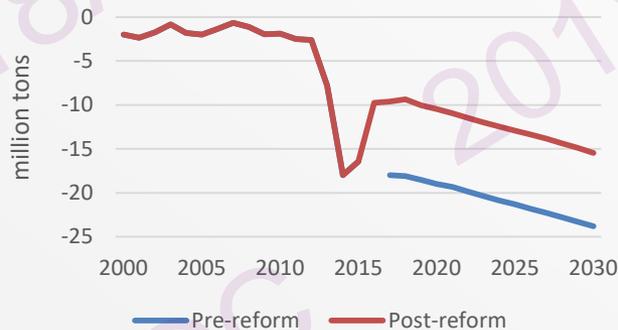
Maize net-trade



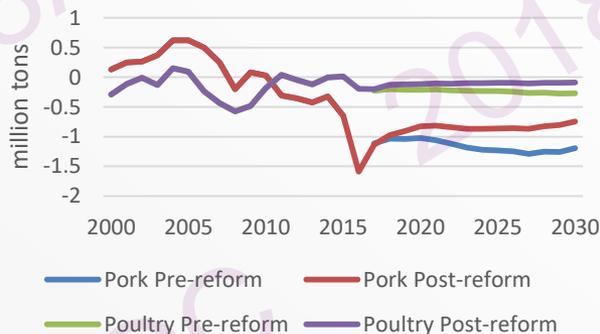
- Price support to maize is removed.
- Producer price declines by 30% in 2030.
- Planted area stays flat.
- Without government intervention, stocks decline to minimum level.
- Imports increase to supplement domestic production.

# Maize market policy reform – implications for China

Other coarse grain net trade



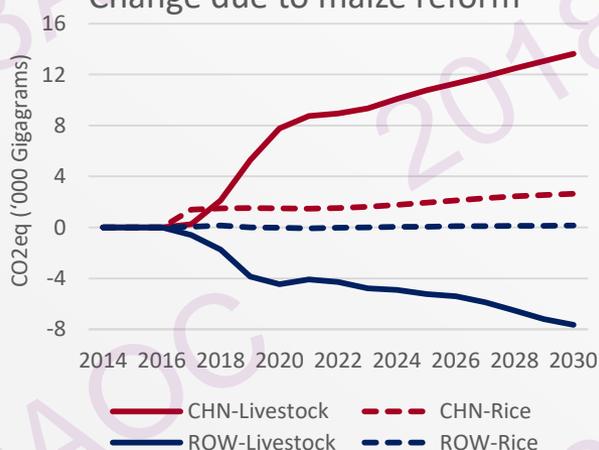
Pork and poultry net trade



Domestic undernourishment



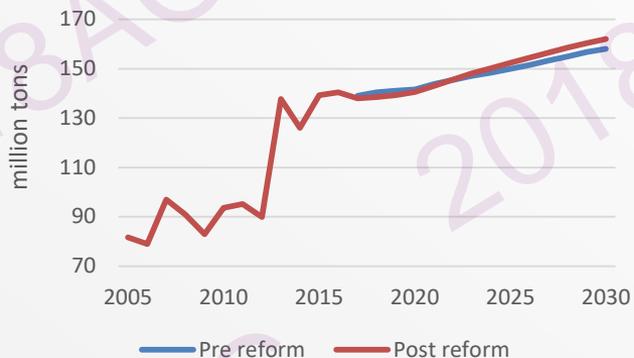
GHG Emissions: Change due to maize reform



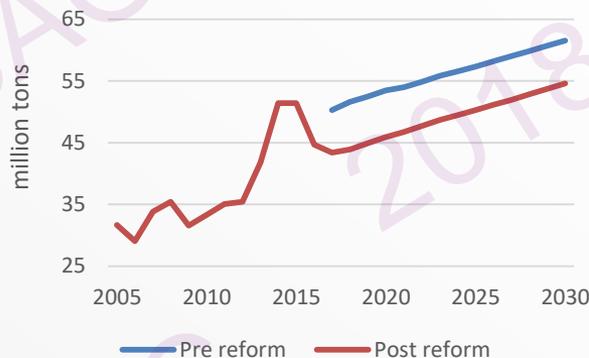
- Recent shift to sorghum, barley imports is reversed.
- Lower feed grain prices boost domestic meat production reducing imports significantly.
- Undernourishment in China falls due to lower food prices, if rural incomes are maintained
- Higher meat and rice production offset the lower maize area – increasing global agricultural emissions.

# Maize market policy reform – implications for the world

Maize exports



Other coarse grains exports

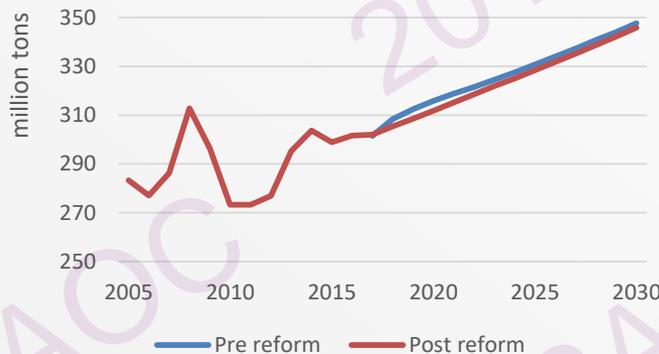


- Maize exports vary modestly, most of the shock is taken by other coarse grains because of adjustments in the feed demand
- Production of maize change, while other coarse grains remains mostly unaffected

Maize quantity produced

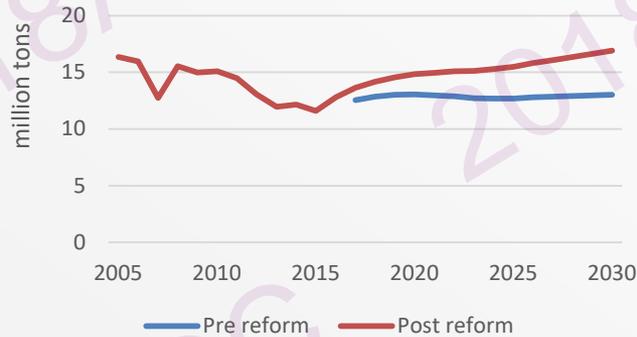


Other coarse grains quantity produced

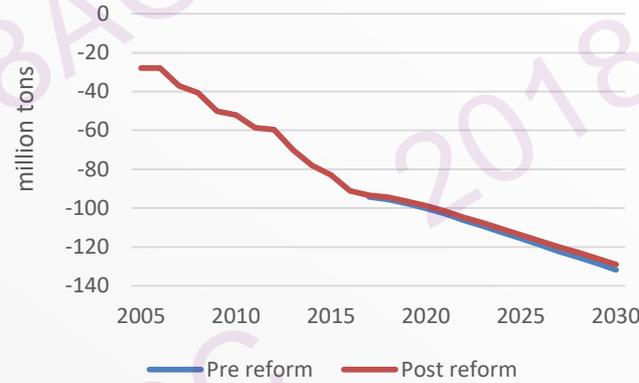


# Maize market policy reform – implications for soybean

Soybeans quantity produced  
China



Soybeans net trade China



- China: Domestic output increase after the reform
- Net trade remain unaffected and world markets impact is marginal

World soybeans quantity produced

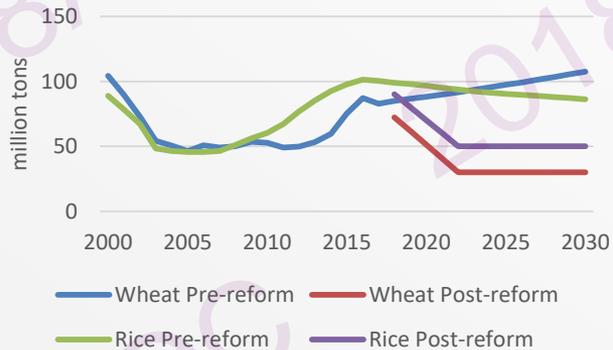


World soybeans exports

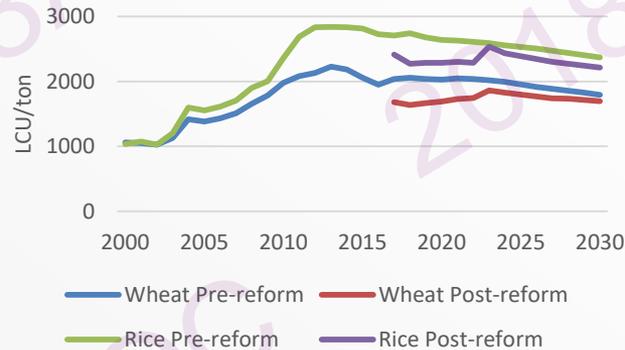


# Wheat and rice market policy reform – market projections

Wheat and rice stocks

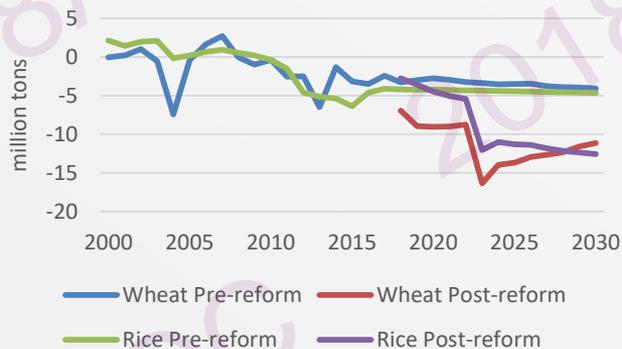


Wheat and rice domestic prices

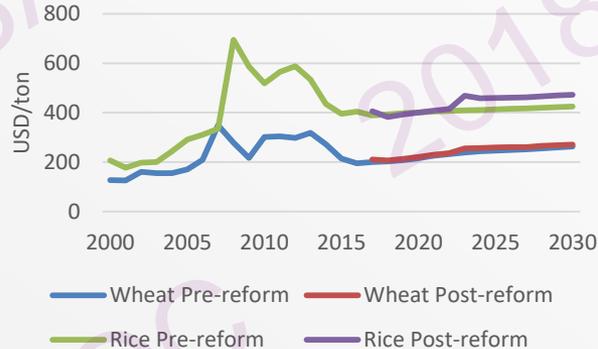


- Price support to wheat and rice is gradually removed, stocks reduced and market access liberalized.
- Domestic prices fall to global level, area shrinks by around 3%.
- Imports compensate supply after the stock release is complete.
- Global wheat and rice prices respond.

Wheat and rice net trade



Wheat and rice global price



# Wheat and rice market policy reform – world market projections

Rice exports

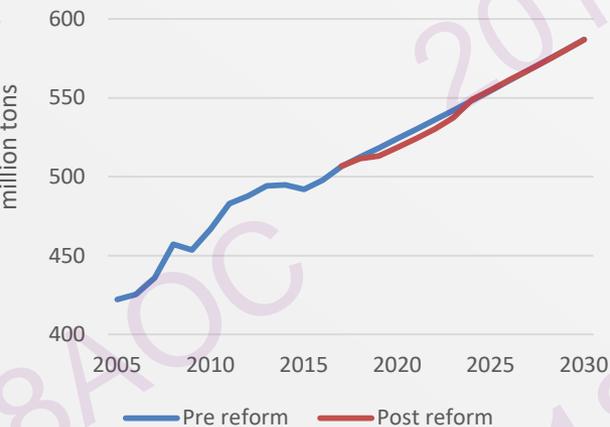


Wheat exports



- The five years transition period (destocking) ameliorate the impact on the world markets
- After transition period ends, world trade increases to meet increasing demand

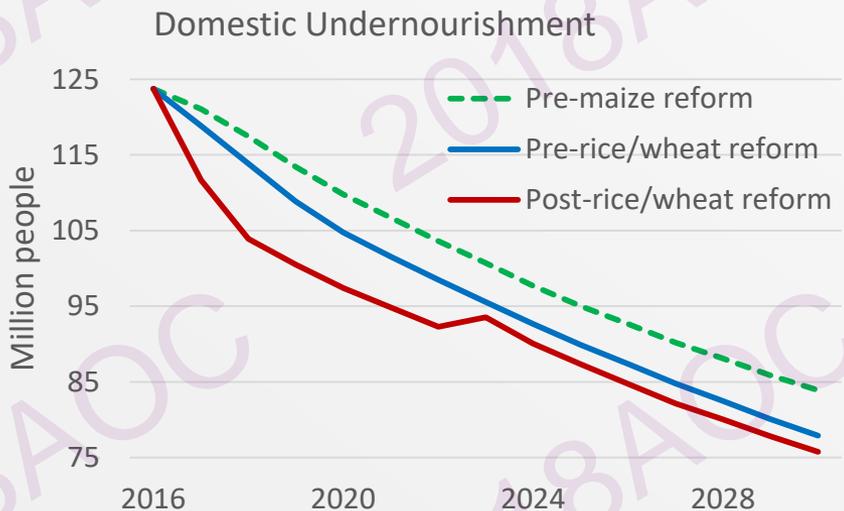
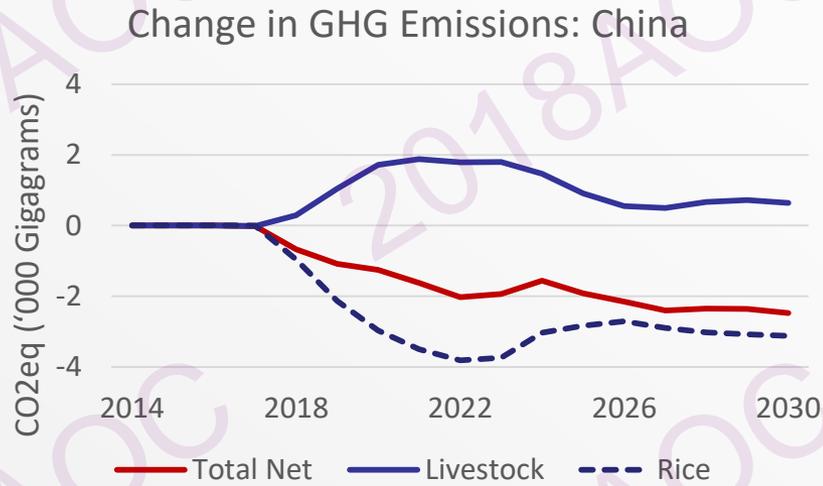
Rice quantity produced



Wheat quantity produced



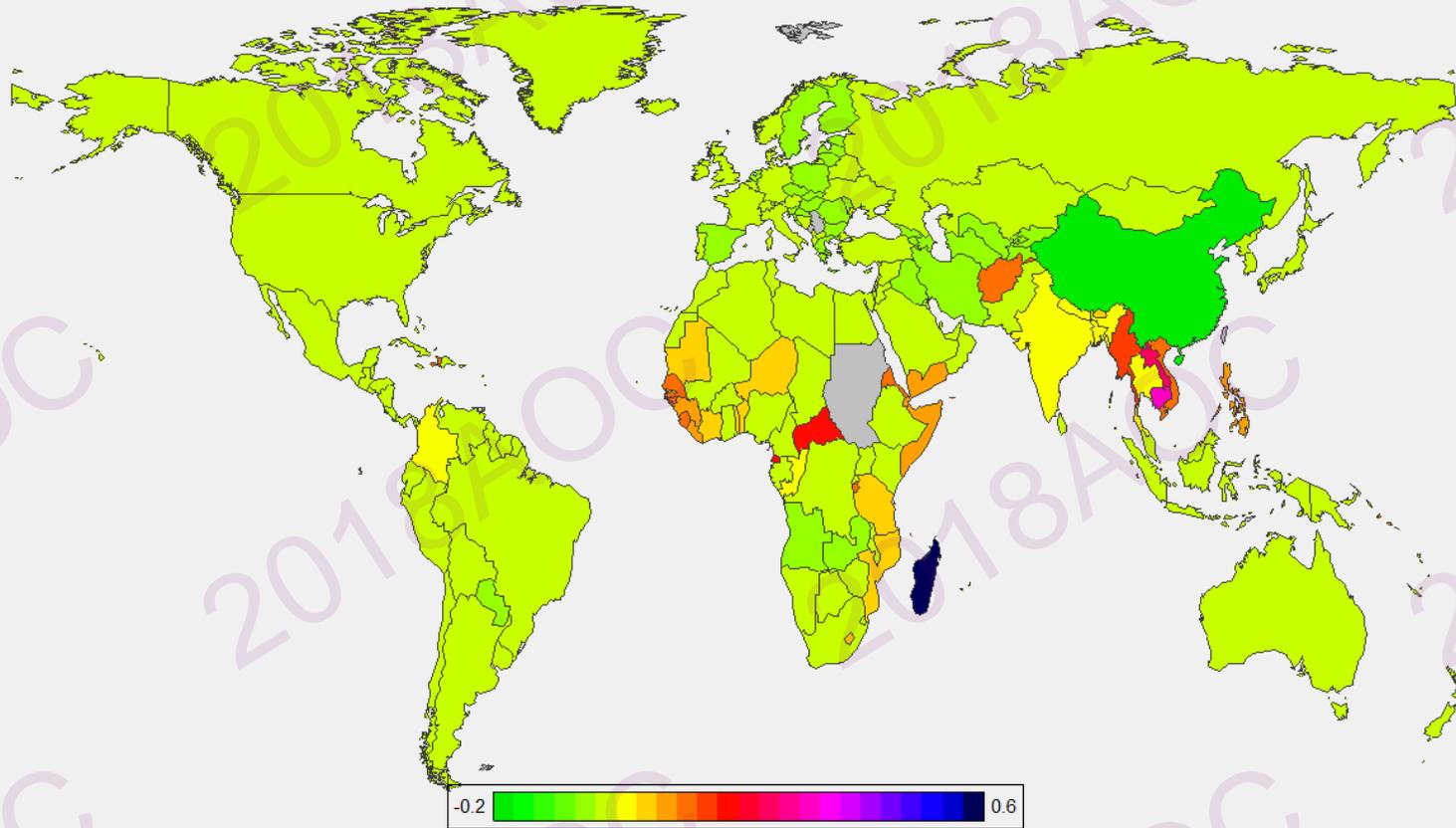
# Wheat and rice market policy reform – implications



- Emissions increase as livestock production responds to grain stock release.
- Reduction in rice emissions outweighs upsurge in the livestock sector.
- After 2024 trade-off between China and ROW – no global net change.
- Positive impact on domestic nutrition, while stock drawdown leads to food price decline.
- Improvements mainly through an increase in consumption of vegetal foods.
- Intake of animal foods remains largely unchanged.

# Global undernourishment impact in 2030

World: Share of Hungry (%), Wheat & Rice Reform, 2030



## Key points and policy challenges

- Policy reforms in a large country like China have a far-reaching impact on the rest of the world.
- Timing, pacing and sequencing is crucial to minimise possible adverse impacts on farm incomes, food security and world markets.
- Sequencing is not only important for market reforms, but also as foundation for possible structural reforms.

# Thank You

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