



ASIAN DEVELOPMENT
OUTLOOK 2021
UPDATE

TRANSFORMING AGRICULTURE IN ASIA
HIGHLIGHTS

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HIGHLIGHTS



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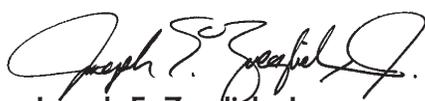
Cover design by Anthony Victoria.

ADO 2021 Update—Highlights

Developing Asia continues to grapple with the COVID-19 pandemic. Renewed outbreaks are a cause for concern, amid uneven progress on vaccination. The region's output is forecast to expand by 7.1% in 2021 and 5.4% in 2022, supported by a broad recovery in exports. Regional growth paths are diverging, with economies that have successfully contained the pandemic or are making good progress on vaccination programs forging ahead. Price pressures are expected to remain in check, with headline inflation forecast at 2.2% in 2021 and 2.7% in 2022.

Several risks cloud developing Asia's outlook. The main threats come from the COVID-19 pandemic, including the emergence of new variants, slower-than-expected vaccine rollouts, and waning vaccine effectiveness. Geopolitical tensions, financial turmoil, and disruptions to global supply chains may also undermine the region's growth prospects. As economies recover from the pandemic, medium-term risks will take center stage again, led by extreme weather events related to climate change, which are becoming more frequent.

Sustainable food production and agricultural systems that are resilient to climate change will be crucial for developing Asia. To transform agriculture, regional economies must tackle challenges from three ongoing shifts—in consumer demand, demographics, and a changing and more fragile environment. Innovative solutions are required to increase the productivity of developing Asia's smallholder farmers and sustainably meet changing demand. Early warning systems and insurance programs will help mitigate the impact of extreme weather shocks on farmers and build resilience. Agricultural policy across the region should support the transformation of agriculture through innovation and markets, and promote food security and improved nutrition.



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Vaccines, variants, and Asia's uneven recovery

- **The COVID-19 pandemic continues to besiege developing Asia.** New daily cases peaked at 105 per million in May and declined to 25 per million in June, only to rise again to 43 per million in July, driven by more infectious variants. The new wave of infections started flattening in August across the region. Developing Asia's progress on vaccination remains uneven and lags behind the rollout in advanced economies. As of 31 August 2021, 28.7% of the region's population had been fully vaccinated, compared with 51.8% in the United States and 58.0% in the European Union.
- **Vaccines are gradually changing policy responses to the pandemic.** While unable to completely stop the spread of the virus, successful vaccine rollouts are turning COVID-19 into a less deadly disease—and this is changing the nature of the pandemic. Governments across the world and in developing Asia are adapting their containment approaches to this changing landscape, so that the link between the severity of an outbreak and the stringency of public health restrictions is being gradually broken by increased vaccination coverage.
- **The uneven progress of vaccinations is contributing to the divergence of growth paths in developing Asia.** In the first half of 2021, growth in the region's largest economies was higher than in the second half of 2020, including in Hong Kong, China; the People's Republic of China (PRC); Singapore; and Taipei, China. These economies quickly rolled out vaccines and successfully contained outbreaks, thereby avoiding tighter restrictions and allowing them to capitalize on strengthening global demand. In Indonesia, the Philippines, and Thailand, however, recovery was held back by new waves of infections and slower progress on vaccination. Leading business indicators suggest economic growth is set to slow across the region.
- **Inflation has accelerated across developing Asia but remains in check.** After declining continuously in 2020, the region's headline inflation rate rose from 0.8% in January to 2.3% in June on rising energy and food prices in some economies and because of increased economic activity as containment measures eased. Inflation remains benign and close to the targets of most central banks across the region, but some Central Asian economies are notable exceptions.
- **Developing Asia's exports are levelling off above prepandemic levels.** Exports continued to rise in the first quarter of 2021 on recovering external demand, and they were 19% above prepandemic volumes in June. Since early 2021, exports have been characterized by a wider range of products, including mechanical machinery and mineral fuels, than was the case early in the pandemic. The increased demand for a broader product base has boosted exports from more developing Asian economies, including India, Kazakhstan, and Pakistan. Meanwhile, Hong Kong, China; Malaysia; the PRC; the Republic of Korea; and Viet Nam continued to benefit from strong global demand for goods and electronics related to the pandemic.

- **Remittances picked up in the first quarter of 2021 in most developing Asian economies; international tourism remains depressed.** Even where remittances did not increase in the first quarter, they declined by less than they did in 2020. International tourism remains generally depressed, although a gradual rebound is ongoing in Georgia and Maldives.
- **Fiscal and monetary policies continue to be supportive of economic recovery in developing Asia.** Fiscal policy will remain accommodative in several economies this year, with a general shift toward consolidation expected for 2022 and beyond. The monetary stance is also largely expansionary, as most central banks refrained from raising policy rates after cutting them in 2020, leading to low or negative real interest rates in many economies.
- **Most regional currencies weakened in the first 8 months of 2021; buoyant liquidity supported financial conditions.** Most regional exchange rates depreciated, and foreign portfolio outflows resulted from the strong economic recovery in the US, the possibility of early monetary normalization by the US Federal Reserve, and uncertainty over the region's recovery due to rising COVID-19 cases. But accommodative monetary stances in developing Asia and around the world have supported liquidity and financial conditions. Regional equity markets remained robust and were above their prepandemic levels. Average risk premiums narrowed marginally.
- **Recovery paths will continue to diverge in developing Asia.** This *Update* expects the regional economy to expand at a slower rate than projected in *Asian Development Outlook 2021* in April. While growth forecasts are raised for East Asia and Central Asia, downward revisions for the rest of the region weigh on the outlook. The recovery in global demand for exports from developing Asia, supported by robust growth in advanced economies, will continue to benefit the region's export-oriented economies. But the recovery momentum has weakened in economies battling renewed waves of COVID-19.
- **Inflation remains benign but is expected to pick up in some developing Asian economies.** Regional inflation is forecast to remain moderate at 2.2% this year before accelerating to 2.7% in 2022. Tepid inflation will be shaped by declining food prices in the PRC and weaker demand in economies hit by new waves of COVID-19. The continuing trend of rising international commodity prices in the first half of 2021 could stoke inflation in economies where pass-through effects on domestic prices are significant.
- **A resurgence in the COVID-19 pandemic remains the main risk to the outlook.** Renewed pandemic waves, possibly driven by the emergence of more infectious and vaccine-resistant variants, the waning effectiveness of vaccines already administered, and slower-than-expected vaccine rollouts could derail developing Asia's recovery—and further sharpen the divergence between the region's economies. But policy makers must also pay heed to other risks, including those arising from climate change, geopolitical tensions, and tightening financial conditions.

Transforming agriculture in Asia

Summary

❖ **Asia must transform agriculture to tackle three emerging challenges: changing demand, changing demographics, and a changing and fragile environment.**

Food demand is increasing and shifting toward animal products, requiring more resource-intensive agriculture. Meanwhile, Asia struggles to improve agricultural productivity as rural populations shrink and age. Further, agriculture is exposed to risks from a changing climate and from farm practices that are not environmentally sustainable.

❖ **Innovation can improve productivity and sustainably meet shifting demand.**

New approaches have emerged to help Asia's smallholder farmers avail of agricultural machine services and thus enhance their labor productivity. Improved technologies and practices help farmers produce more food without overusing chemical inputs or water. Recent rapid expansion in aquaculture can, if properly regulated, sustainably provide to Asian consumers animal protein from healthy seafood products.

❖ **Asia's farmers need better and more comprehensive support systems.**

As extreme weather shocks worsen and become more frequent, early warning systems and affordable insurance can mitigate impacts on farmers and rural communities. Expanding value chains allow farmers to diversify their production into high-value crops. Digital technologies can help farmers and traders reach new markets, just as they have served urban consumers during the COVID-19 pandemic. Government policies should focus less on traditional production support and, instead, encourage market-oriented innovation.

Evolving demand even as food insecurity persists

- **Rising incomes and urbanization are transforming food consumption.** Daily energy consumption per capita in the region is expected to increase from 2,612 kilocalories in 2012 to 2,844 by 2030. Meanwhile, demand for food in Asia has shifted away from basic staples toward more resource-intensive animal products. Notably, Asians are the biggest consumers of fish per capita in the world. Agriculture in Asia must be productive enough to meet demand as it expands and evolves.
- **Despite the region's growing prosperity, malnourishment persists.** In the past 2 decades, developing Asia has achieved remarkable progress in reducing undernourishment and micronutrient deficiency. Despite these gains, 86.8 million children in Asia under age 5 still suffer stunting. Whereas insufficient agricultural production used to be a primary cause of undernourishment in Asia, today the larger problem is economic access to nutritious food. Even in economies that have achieved high average calorie intake per capita, malnutrition persists as micronutrient deficiency. Another consequence is the incidence of obesity and related noncommunicable diseases rising steeply as healthy traditional diets yield to convenient processed food, often imported.

Shifting demographics that challenge agricultural development

- **Asia's rural communities are rapidly shrinking, feminizing, and aging.** A predictable feature of modern economic development is a population shift away from agriculture. Higher-paying manufacturing and service jobs in cities draw workers out of rural areas, steadily eroding the share of rural population in Asia from 80% in 1970 to 52% in 2020 and a projected 38% by 2050. With many men migrating to cities, agriculture relies increasingly on female workers, who often have less access to finance and other resources. The share of older farmworkers has similarly increased, with farmers aged 50 or older becoming the majority in Sri Lanka and Thailand.

Stiff environmental challenges facing agriculture in Asia

- **Climate change poses ever greater challenges to agriculture in Asia.** Crop growth and yields are highly sensitive to significant changes in temperature and rainfall. Extreme weather such as storms, floods, and droughts have frequently battered Asian agriculture in the recent past. In 2013, Typhoon Haiyan dealt Philippine agriculture over \$1.4 billion in losses. With climate change, the frequency and scale of such events is escalating, as is the damage they cause. In South Asia, monsoon rains are likely to increase by 6.4% even as droughts lengthen and occur 5–10 times more frequently.

- **Agriculture faces environmental challenges of its own making.** The green revolution succeeded in part through its heavy use of chemical fertilizers and pesticides. Fertilizer subsidies lowered prices for chemical inputs and encouraged their overuse, causing environmental pollution. At the same time, water scarcity worsened. Asia has developed and expanded irrigation systems such that it has 70% of the world's irrigated farmland, but farmers' collective management of irrigation has weakened in recent decades. As aquaculture expands rapidly in Asia, sustainability issues revolve around mangrove destruction, land salinization, groundwater depletion, and health issues concerning residual chemicals in fish cultured for human consumption.

Innovation to boost productivity, and regulation for sustainability

- **Smallholder farmers' access to machines can be improved.** Small and fragmented landholding inhibits farm mechanization in much of Asia. Innovative arrangements have emerged that enable some of Asia's 350 million smallholder farmers to hire machine services to work on fields consolidated by farmer groups. These innovative approaches would better realize their potential if outdated laws and regulations governing land and other agriculture factors were modernized.
- **With improved practices, farmers can safeguard the environment.** Chemical inputs can be optimized and reduced by promoting such innovative techniques as site-specific nutrient management and environmentally sensitive integrated pest management. When improved modern irrigation systems use volumetric water tariffs, lined canals, and remote water sensing and control facilities, farmers can use water more efficiently. Potential exists for the private sector to play an important role in providing the farm extension and advisory services that are critical to making agriculture more sustainable.
- **Well-regulated aquaculture can meet Asian consumer demand for seafood.** With many marine fisheries around the world already overfished, satisfying Asian consumers' robust and growing appetite for seafood will depend on increased aquaculture production. Aquaculture currently provides 52% of fishery production worldwide, and Asia dominates global aquaculture with an 88% share. When seafood is more readily available and affordable, consumer nutrition improves.

Better and more comprehensive support systems for Asian farmers

- **Early warning systems offer efficient protection from weather risks.** In 2019, timely information on monsoon floods in northern Bangladesh helped communities and the government prepare and secure necessary supplies, slashing economic losses by two-thirds. Advanced spatial information systems are critically important in developing early warning systems able to mitigate farmers' exposure to climate risks and protect their livelihoods—as is strengthened national and local capacity to integrate these systems. Farmers can improve their climate resilience by adopting crop varieties that cope well with weather shocks.

- **Innovative crop insurance builds resilience in Asian farm communities.** Crop insurance schemes exist in over three-fourths of the economies in developing Asia but are fully operational nationally in only four: India, the PRC, the Philippines, and Sri Lanka. Insurance programs use spatial information systems to speed crop damage assessments and expedite claim settlement. Enhanced spatial information systems can expand the coverage of insurance programs.
- **Value chains evolve as farmers diversify into high-value crops.** With high-value crops providing 32% of agriculture production value, surpassing that of cereal crops at only 26%, contract farming is now widely used to facilitate production and procurement. Although contract disputes often arise because of unclear agreements and weak contract enforcement, contract farming can benefit farmers in Asia with advanced agreement on output prices and the technical assistance they need to compete in high-value food markets.
- **Digital technologies can expand inclusive growth to farmers in remote areas.** In recent years, digital technology has improved supply chains and helped farmers acquire technical and market information, connecting farmers in remote areas with traders and consumers. Under the COVID-19 pandemic, expanded e-commerce facilitated sales of agricultural products and home delivery of prepared food, which mitigated food service disruption and losses.
- **Agricultural policy should support innovation, markets, and better nutrition.** Traditional agricultural policies have directly supported agricultural production to achieve and maintain self-sufficiency. However, such policies can induce overproduction and distort markets. A better approach decouples rural welfare support from agricultural policy, which properly invests in research and development, encourages innovation, and pursues market-oriented development. Finally, food policies should promote a balanced and nutritious diet for all.

GDP growth rate, % per year					
	2020	2021		2022	
		April ADO 2021	September Update	April ADO 2021	September Update
Developing Asia	-0.1	7.3	7.1	5.3	5.4
Central Asia	-1.9	3.4	4.1	4.0	4.2
Armenia	-7.4	1.8	5.2	3.0	3.5
Azerbaijan	-4.3	1.9	2.2	2.5	2.5
Georgia	-6.2	3.5	8.5	6.0	6.5
Kazakhstan	-2.6	3.2	3.4	3.5	3.7
Kyrgyz Republic	-8.6	3.5	3.5	5.0	5.0
Tajikistan	4.5	5.0	5.0	5.5	5.5
Turkmenistan	1.6	4.8	4.8	4.9	4.9
Uzbekistan	1.6	4.0	5.0	5.0	5.5
East Asia	1.8	7.4	7.6	5.1	5.1
Hong Kong, China	-6.1	4.6	6.2	4.5	3.4
Mongolia	-5.3	4.8	4.6	5.7	6.0
People's Republic of China	2.3	8.1	8.1	5.5	5.5
Republic of Korea	-0.9	3.5	4.0	3.1	3.1
Taipei, China	3.1	4.6	6.2	3.0	3.0
South Asia	-5.6	9.5	8.8	6.6	7.0
Afghanistan	-1.9	3.0	..	4.0	..
Bangladesh	3.5	6.8	5.5	7.2	6.8
Bhutan	0.9	-3.4	-3.4	3.7	3.7
India	-7.3	11.0	10.0	7.0	7.5
Maldives	-32.0	13.1	18.0	14.0	15.0
Nepal	-2.1	3.1	2.3	5.1	4.1
Pakistan	-0.5	2.0	3.9	4.0	4.0
Sri Lanka	-3.6	4.1	3.4	3.6	3.4
Southeast Asia	-4.0	4.4	3.1	5.1	5.0
Brunei Darussalam	1.2	2.5	1.8	3.0	3.5
Cambodia	-3.1	4.0	1.9	5.5	5.5
Indonesia	-2.1	4.5	3.5	5.0	4.8
Lao People's Democratic Republic	-0.5	4.0	2.3	4.5	4.0
Malaysia	-5.6	6.0	4.7	5.7	6.1
Myanmar	3.3	-9.8	-18.4
Philippines	-9.6	4.5	4.5	5.5	5.5
Singapore	-5.4	6.0	6.5	4.1	4.1
Thailand	-6.1	3.0	0.8	4.5	3.9
Timor-Leste	-8.5	3.4	2.2	4.3	4.0
Viet Nam	2.9	6.7	3.8	7.0	6.5
The Pacific	-5.3	1.4	-0.6	3.8	4.8
Cook Islands	-5.9	-26.0	-26.0	6.0	7.1
Federated States of Micronesia	-3.9	-1.8	-1.1	2.0	2.0
Fiji	-15.7	2.0	-5.0	7.3	8.8
Kiribati	0.6	-0.2	0.3	2.3	2.3
Marshall Islands	-2.6	-1.4	-3.3	2.5	4.0
Nauru	0.8	1.5	1.5	1.0	1.0
Niue
Palau	-10.3	-7.8	-10.8	10.4	8.8
Papua New Guinea	-3.3	2.5	1.3	3.0	4.1
Samoa	-3.2	-9.2	-9.2	3.1	3.1
Solomon Islands	-4.5	1.0	1.0	4.5	4.5
Tonga	-0.8	-5.3	-5.3	1.8	1.8
Tuvalu	1.0	2.5	2.5	3.0	3.0
Vanuatu	-8.5	2.0	-3.0	4.0	5.0

... = not available, ADO = Asian Development Outlook, GDP = gross domestic product.

Note: Because of the uncertain situation, no forecasts are provided for 2021 and 2022 in Afghanistan, and for fiscal year 2022 in Myanmar.

Inflation, % per year					
	2020	2021		2022	
		April ADO 2021	September Update	April ADO 2021	September Update
Developing Asia	2.8	2.3	2.2	2.7	2.7
Central Asia	7.5	6.8	7.7	6.3	6.7
Armenia	1.2	3.8	5.5	2.5	3.0
Azerbaijan	2.8	3.5	4.5	3.0	3.0
Georgia	5.2	5.0	9.5	3.5	4.0
Kazakhstan	6.8	6.5	6.9	6.2	6.4
Kyrgyz Republic	6.3	7.0	10.0	7.0	7.0
Tajikistan	9.4	9.0	9.5	8.0	9.0
Turkmenistan	10.0	8.0	10.0	8.0	10.0
Uzbekistan	12.9	10.0	10.0	9.0	9.0
East Asia	2.2	1.5	1.4	2.2	2.2
Hong Kong, China	0.3	1.3	1.5	2.0	2.0
Mongolia	3.7	6.9	6.9	8.5	8.5
People's Republic of China	2.5	1.5	1.3	2.3	2.3
Republic of Korea	0.5	1.3	2.0	1.5	1.6
Taipei, China	-0.2	1.1	1.5	1.1	1.1
South Asia	6.5	5.5	5.8	5.1	5.1
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India	6.2	5.2	5.5	4.8	4.8
Maldives	-1.4	3.0	2.5	2.5	2.0
Nepal	6.2	5.0	3.6	6.0	5.2
Pakistan	10.7	8.7	8.9	7.5	7.5
Sri Lanka	4.6	4.5	5.1	5.0	5.3
Southeast Asia	1.2	2.4	2.2	2.4	2.4
Brunei Darussalam	1.9	0.7	1.3	0.7	0.7
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Nauru	0.9	1.1	1.1	2.0	2.0
Niue	2.7
Palau	0.7	0.0	-0.3	1.0	1.0
Papua New Guinea	4.9	4.3	4.6	4.4	4.6
Samoa	1.5	-2.5	-3.0	2.7	3.2
Solomon Islands	3.0	2.5	2.5	3.5	3.5
Tonga	0.2	0.8	1.3	2.5	2.5
Tuvalu	1.6	3.3	4.0	3.5	2.5
Vanuatu	5.3	3.5	5.0	3.7	3.7

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