



A farmer climbs up a palm sugar tree to collect sap at a forest in Sintang regency, West Kalimantan, Indonesia.

Context

Agriculture and land-based natural resource sectors generate 17 percent of Indonesia's GDP (with GDP growth in the agricultural sector of 3.5 percent in 2017). Among farmers, 93 percent are smallholders. Some 11 million workers and their families depend on the oil palm industry, which generates 20 percent of national export earnings (equivalent to \$17.7 billion a year), while 16 million work on other food crops – four million on livestock and three million in horticulture.

The ocean is responsible for eight percent of GDP. As the world's second-largest fish producer, marine-capture fisheries and aquaculture together employ seven million people and generated export earnings of \$4.1 billion in 2017. Fish contribute 52 percent of all animal-based protein in the national diet.

Climate change and natural resource degradation are likely to halve potential GDP growth, from seven percent to 3.5 percent, by 2050. The negative economic impact of peat fires in 2015 was estimated at \$16 billion. Deforestation, forest and peat fires and land use change are responsible for at least 55 percent of Indonesia's greenhouse gas emissions. Rates of deforestation declined significantly in 2017 and again in 2018 but remain high in absolute terms.

Indonesia has one of the world's highest per capita rates of food loss and waste, including of fish, reaching an estimated 300 kilograms per capita a year. This is the result of a combination of factors, including poor infrastructure and complex value chains between farm (or port) and fork.

High levels of malnutrition – up to one in three children is stunted by malnutrition – when taken together with obesity and diabetes, lead to GDP losses of on average two to three percent a year.

Critical transitions

National government policy in Indonesia addresses each of the ten critical transitions set out in the report. Of these, the following four have the highest priority:

1

Healthy diets. Ensuring a healthy and nutritious diet to reduce stunting and maternal and child mortality is one of the strongest political commitments made by President Jokowi for his second term in government. Particularly critical here will be nationwide policies to promote healthy diets in the first 1,000 days of life, through breastfeeding and qualified complementary feeding, in schools, communities and faith groups; to regulate advertising and marketing of sugary junk food and beverages, especially to children; and to increase investment in universal access to health coverage.

2

Productive and regenerative agriculture. Indonesia's agricultural value chains are characterised by high rates of smallholder poverty, soil erosion and food loss and waste. Innovations in value chains, such as the fast-growing e-commerce and app community, are causing a productivity revolution. Companies such as STOQO are enabling smallholder producers to supply fresh fruit, meat and vegetables directly to urban consumers, ensuring better incomes for producers and reduced loss and waste. Technological advances in oil palm plantations are increasing productivity, meaning that Indonesia can meet its oil palm expansion goals without further encroachment on forests.

3

Protecting and restoring nature. Indonesia has made its moratorium on expansion into primary forest and carbon-rich peatlands permanent, equating to the protection of an area of 66 million hectares, and an over 80 percent reduction in peat conversion in 2017 and 2018. Additionally, it has committed to the One Map policy it has instituted across government, which reconciles competing claims on the land from different sectors. The national government is exploring the establishment of an ecological fiscal transfer mechanism to maintain areas of high forest cover, as well as ongoing policy and financial support for peatland conservation and restoration.

4

Healthy and productive ocean. Indonesia has a national plan for its ocean, including a planned expansion of its marine-protected areas network and a commitment to ensure more sustainable fisheries management. To achieve these commitments will require political will, joined-up government and increased investment.