INDONESIA: INCLUSIVE AND SUSTAINABLE GROWTH ASSESSMENT

I. RECENT GROWTH, POVERTY, INEQUALITY AND ENVIRONMENTAL DYNAMICS

A. Economic Performance

1. **Economic growth.** Gross domestic product (GDP) growth in Indonesia averaged 5.8% in 2004–2014 but decelerated to 4.8% in 2015. The slowdown was partly policy driven, as the Government of Indonesia acted to restrain domestic demand to reduce the current account deficit and curb inflation. The slowdown was sharper than expected, however, export values declined as a result of several years of weak global commodity prices. Private consumption continued to be a stable source of growth as the number of middle class consumers steadily increased. The contribution of public spending was modest, because the government’s fiscal space was eroded by untargeted energy subsidies. Investment increased and returned to its pre-Asian financial crisis level of 33% of GDP in 2012, but then weakened during 2013–2015.

2. **Sector structure and growth.** New sources of inclusive growth are needed to overcome Indonesia’s long-standing dependence on mining, primary commodities, and Bali-centered tourism. In response to the increasing incomes of middle-income households, and rapid urbanization, economic growth was focused in the non-tradable services sector, which grew at an average of 7.3% per year during 2005–2015. In 2015 it comprised 44.7% of GDP and provided 44.8% of total employment. The information and communication sector continued to record double-digit growth, and the finance sector also expanded strongly. However, these well-performing economic sectors account for just 7.1% of total employment. Most workers in the services sector are absorbed into low-productivity jobs in the trade sector or into government jobs.

3. The agriculture sector benefited from the commodity boom in the early 2000s but annual sector growth declined to 3.8% during 2005–2015, below the national GDP growth average. Labor productivity in agriculture remains low. Agriculture employs 34% of the country’s workforce, but accounted for just 14% of GDP in 2015. Volatile food prices and the El Niño drought in 2015 also contributed to weak performance in 2015.

4. The industrial sector accounted for 41.3% of GDP in 2015. However, the performance of the mining, oil, and gas subsector has also weakened in response to the downturn in commodity prices. The manufacturing component of the industrial sector has also remained subdued. It accounted for just over 20% of GDP and contributed 0.9% to GDP growth in 2015. Manufacturing has been growing at a slower rate than the economy as a whole. As a result, the share of manufacturing in the economy has steadily declined. Several policy reforms were introduced in 2015 and 2016 to reinvigorate manufacturing, but these will take time to influence investment.

5. Foreign direct investment in Indonesia increased from $16.2 billion in 2010 to $29.3 billion in 2015. Robust growth in domestic demand drove higher investment in basic metals, food, chemicals, and automotive parts. At the same time, imports of intermediate goods for the manufacturing sector declined with import substitution taking place in some product lines.

6. **Economic vulnerability.** Indonesia has been vulnerable to volatility in the global financial market because of its relatively open capital account, and a large foreign presence in its stock (53%) and bond markets (39%). The domestic bond market is still shallow at 14.0% of GDP, compared to 35.2% in the Philippines and 67.8% in Thailand. Indonesia’s vulnerability has been amplified by an increased dependence on commodity exports relative to total trade which
peaked in 2012. Prudent macroeconomic management, larger international reserves, and a more flexible exchange rate have improved resilience to external shocks. However, the economy needs consistent and comprehensive structural reforms to sustain wider improvement in productivity, better infrastructure to improve competitiveness, and a deeper and more inclusive financial market to enhance market stability.

B. Poverty and Inequality

7. Profile of poverty. Using the national poverty line (consumption outlays of Rp333,034), some 28.5 million people were living in poverty in September 2015, or 11.1% of the population.\footnote{If an international poverty line (purchasing power parity of $2 per day) is used, 42% of the population would be classified as poor.} In September 2015 the poverty gap index fell to 1.84, and the poverty severity index to 0.51, meaning that those below the poverty line are more poor than before. Some 14.2% of the rural population are classified as poor compared to 8.3% of the urban population. Poverty incidence was highest in the provinces of Papua (27.8%), West Papua (26.3%), East Nusa Tenggara (19.6%), Maluku (18.4%), Gorontalo (17.4%), and West Nusa Tenggara (17.1%). However, collectively, these provinces had fewer poor people than were found in East Java, which had a poverty incidence of 12.3%, and 4.8 million poor people, in 2014.\footnote{Biro Pusat Statistik. 2015. The overview of poverty in Indonesia, March 2015. Jakarta. http://www.bps.go.id/linkTabelStatis/view/id/1488}

8. The poverty problem in Indonesia is now largely one of low incomes as opposed to access to basic needs. Indonesia classifies some 65 million people as near-poor or vulnerable to poverty. Many households move in and out of poverty depending on fluctuations in economic conditions. For example, some 55% of households that were classified as poor in 2014 were not classified as poor a year earlier.

9. Slowing pace of poverty reduction. The poverty level declined from 17.8% in 2006 to 11% in 2015 (Table 1). From 2006 to 2010, poverty incidence declined by 1.2% per annum; from 2011 to 2015, the rate of decline was just 0.5% per annum. There has been increasing difficulty in reaching the remaining households who are classified as severely poor, many of whom have incomes far below the poverty line.

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<td>Absolute Poverty (% of population)</td>
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<td>Rural Poverty (% living below rural poverty line)</td>
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10. Rising inequality. Income and consumption inequality in Indonesia have been increasing steadily since 2000. After recovering from the 1997–1998 Asian financial crisis, Indonesia experienced a period of strong economic growth, driven in part by a commodities boom and strong growth in property and financial services. A relatively small share of total
households benefited from the commodities and property boom, contributing to widening inequality. During this period the consumption Gini climbed from 0.31 in 2000 to 0.40 in 2015.\(^3\) Using data on the distribution of consumer credit, the World Bank estimates the Gini coefficient could have been as high as 0.51 in 2014, making Indonesia a high–inequity country.\(^4\) The World Bank also estimates that the top 1% of income earners control some 50% of the nation’s financial and property wealth, and some 49% of national income goes to the richest quintile, ranking Indonesia as one of the world’s least equitable countries. In 2002, average consumption per person of the richest 10% of households was 6.6 times that of the poorest 10%; by 2013, this had risen to 10.3 times. Overall, government spending has helped reduce inequality, although in some cases, such as fuel subsidies, public spending exacerbated inequality.\(^5\) There is an urgent need to develop sources of economic growth that are more inclusive, in order to foster broad-based prosperity.

11. **Millennium Development Goals progress.** Despite widening inequality and slowing growth, Indonesia has made steady progress on several Millennium Development Goals (MDGs) over the past decade. The country has achieved four MDGs, namely: access to primary education, gender equality and empowerment of women, reducing child mortality, and developing a global partnership for development. The under-five mortality rate declined steadily from 61.7 deaths per 1,000 live births in 1990 to 41.1 deaths per 1,000 live births in 2000 and 23.0 deaths per 1,000 live births in 2015 meeting the MDG target of a two third reduction in the under five-year old mortality rate by 2015. The country is also on track to reduce the prevalence of under-five children who are underweight, at around 19.6% in 2013. Stunting, however, remains a major problem, with nearly a third of all under-five children estimated to suffer from stunting and are therefore vulnerable to cognitive impairment. Indonesia is also behind in achieving another health-related goal—reducing the maternal mortality ratio—which is estimated at 220 deaths per 100,000 live births, well above the MDG target of 102 deaths per 100,000 live births by 2015. Sustainable access to safe drinking water and basic sanitation is also lagging.

C. **Rural Productivity**

12. Large numbers of households derive their income from food production, and food is the single largest expenditure item for the vast majority of Indonesian households.\(^6\) Food crop production has grown relatively slowly at 3.1% per year during 2005–2015. Food imports have increased despite high (and volatile) domestic food prices. The vast majority of Indonesia’s food crop producers are either landless or cultivate tiny landholdings. Food crop producers tend to earn low incomes and many fall into and out of poverty. Efforts to protect the domestic food markets have led to large discrepancies between some domestic and international food prices, penalizing poor consumers. Some 40 million hectares (ha) of land are dedicated to agriculture production, with low–value paddy production occupying approximately one–third of total cultivated land. Productivity in the agriculture sector, at approximately $3,000 per worker, is low compared with neighboring countries such as Malaysia, where added–value per agricultural

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\(^3\) Estimates of the primary wage Gini for all income earners indicate that it rose from 0.41 in 2001 to 0.45 in 2014. The primary wage Gini (or income Gini) refers to own account workers, regular employees and casual employees, which account for 65% of the labor force in Indonesia.

\(^4\) World Bank. 2015. *Inequality in Indonesia: Why is it rising and what can be done?* Jakarta.

\(^5\) A World Bank study found that about 40% of fuel subsidy benefits went to the richest 10% of households, and less than 1% to the poorest 10%. In addition, the poor receive disproportionately less from infrastructure because they live in areas that often have the most difficulty in accessing basic services.

\(^6\) Agriculture still provides employment to 24 million farm households. Poverty in Indonesia remains a predominantly rural and agricultural phenomenon: in 2010 over 60% of those earning less than $1.25 per day lived and worked in agriculture.
worker is closer to $10,000 per year. Rural productivity is held back by poor farm-to-market infrastructure, irrigation systems that require repair, technological gaps, and weak value-chain development. Some progress is being made in diversifying production. Estate crops, fisheries, and livestock production have grown at 6%–7% per year, and there is potential for further diversification into higher-value activities.

13. Water resources and irrigation management play an important role in the country’s efforts to increase agricultural output, productivity, and incomes. However, the country’s irrigation system is in very poor condition, because of limited investment and commitment to operations and maintenance and poor management of services. Lack of access to irrigated water increases vulnerability to droughts and other climatic events. Irrigation services need to be improved to increase rice yields, provide farmers with an incentive to diversify from low-value to high-value crops, increase rural incomes, and enhance food security. New irrigation investments should consider modernizing irrigation methods to increase the ability of farmers to move to higher value-added cropping and enhance water use efficiency. Opening the rice market to private trade while improving rural infrastructure, technology and value-chains would boost rural incomes and improve food consumption, and hence contribute to strengthening food security.

14. Fish provides nearly two-thirds of protein requirements in the Indonesian diet. Fish consumption is rising rapidly as more consumers reach middle-income levels. Coastal fisheries suffer from overfishing; many species in several fishery resource management areas, especially in areas to the west of Indonesia, are overexploited. The greatest scope for growth in the fisheries sector is in aquaculture, where only 25% of potential land for aquaculture is used. Around 2 million ha of land is available for potential development of brackish-water pond culture, around 1 million ha for integrated rice farming and fish culture, and around 150,000 ha for fresh water fish culture in rivers and lakes.

D. Labor Market Developments

15. Employment. Owing to its rapid growth, the services sector became the key source of employment, creating 14.4 million jobs in 2006–2015. Industry recorded modest performance, contributing only 7.1 million new jobs, including 4.4 million jobs in manufacturing. Agriculture lost 900,000 jobs over the same period. Most new jobs were generated in urban areas. The majority of jobs created use short-term contracting arrangements or are in the informal sector. Employment quality is a major issue, and compliance with existing labor regulations is low. Youth unemployment, skills shortages, and skills mismatches are also persistent challenges. Gains in labor productivity have been slow, and a multifaceted approach to accelerate labor productivity is needed to support growth in higher value-added activities.

16. Women’s economic empowerment. Indonesia’s female labor force participation remained low through 2015, at 48.9% compared with 82.7% for males. The high incidence of women not participating in the labor force is attributed to their domestic responsibilities, with many women reporting they are engaged full-time in housekeeping activities. Women’s low labor force participation also reflects their limited access to childcare services and a lack of

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7 In 2014, The Ministry of Public Works and Housing (MPWH) estimates that only 55% of the nation’s irrigation system is functioning at full capacity because irrigation systems are in bad need of repair, limiting yields and reducing cropping intensity. Ministry of Public Works and Housing. 2014. Irrigation Systems Rapid Assessment. Jakarta.


9 The industry sector includes manufacturing, mining, utilities, and construction.
flexible work time arrangements that are needed to support involvement by women in the labor market. When women do participate in the labor force, they often work temporarily as "unpaid family workers" in the agriculture or trade sector, and exit the labor force frequently in accordance with their domestic responsibilities. They are more likely to be employed in the informal sector (the proportion is twice that of men). Limited access to training, gender segregation in the labor market, and the triple burden of income earning, family responsibilities and childcare are key factors limiting the engagement and advancement of women in the labor market.

17. Women’s representation in managerial positions tends to be low, with 43% of firms having female participation in their ownership, 31% having female top managers, and women comprising approximately 18% of the board of directors in listed companies. Gender equality in asset ownership is also an issue in asset ownership, with 36.2% of married women aged 15 to 49 years owning land individually or jointly compared to 54.1% of men. Women are highly likely to lose their land rights upon widowhood, divorce, or desertion, contributing to structural inequality on gender grounds.

E. Education and Training

18. Access. There has been rapid growth in access to education, but not in the quality and relevance of the education system. The Indonesian school system is one of the largest and most diverse in the world, with more than 50 million students, 4 million teachers, and more than 250,000 schools. Between 1980 and 2013, the mean years of schooling increased from 3.1 to 7.5 years. Indonesia has achieved almost universal access to primary education with a net enrolment rate of 95.5% in 2013. Enrolment in junior secondary education level stood at 77% in 2013, up from 63.5% in 2003—ahead of the Philippines and Malaysia, but below Thailand. Access to senior secondary education has also expanded significantly, with enrolments growing by more than 80% and the net enrolment rate increasing from 37% in 2000/2001 to school year 2011/2012. The gross enrolment rate at the higher education level rose from 21.3% in 2008 to 27.1% in 2011 (footnote 8). Gender disparities have largely disappeared at all levels of education, although issues remain; in particular, underrepresentation of females in vocational training, and in science, technology and engineering.

19. Quality. Quality has emerged as the greatest challenge to Indonesia’s education and training system. Although 20% of public spending is allocated to education, Indonesia performs poorly in international comparisons of basic literacy and numeracy, and large numbers of school leavers lack the skills required in the labor force. This is one contributor to persistently high youth unemployment in Indonesia. Some progress has been made in improving the quality of basic education through increases in the number of qualified teachers, higher teacher pay, the introduction of teacher certification, and strengthened continuous professional development. However, teacher absenteeism, an outmoded curriculum, and scant school incentives to improve education quality combine to weaken learning outcomes.

20. The quality of polytechnic education is also generally poor. A lack of qualified teachers, poorly equipped schools, and ineffective linkages with employers' hampers skills training at all
levels. Polytechnic management tends to be rigid, work placements badly organized and financing support low.

21. **Variable quality of university graduates.** The quality of tertiary education is low and the learning achievement of most students is inadequate. In a 2008 World Bank survey of employers, two-thirds complained that finding employees for professional and management positions was difficult or very difficult. State-run universities dominate the higher education system but receive low levels of government funding (some 0.3% of GDP), and are tightly regulated. Private funding has come to dominate higher education, but without credible accreditation and quality control mechanisms in place. The quality of tertiary institutions is highly variable, with small pockets of excellence alongside large numbers that provide training of sub-standard quality.

F. **Urbanization**

22. Indonesia’s urban population is increasing at about 4% per year; it more than doubled during 1990–2015, from 56 million to around 136 million, and is expected to grow to 183 million (68% of the total population) by 2025. Rising incomes and increasing congestion in large metropolitan areas such as Jakarta and Surabaya will significantly increase the demand for housing, shopping space, and consumer durables in smaller cities. In 2010, it was estimated that approximately 74% of GDP was produced in cities, a proportion that is likely to increase as urbanization proceeds. Human health and well-being are at risk from the rapid urbanization.

G. **Environment, Climate Change and Disaster Risks**

23. Indonesia’s land and marine jurisdiction covers approximately 7.7 million square kilometers. About 6,000 of its 17,500 islands are inhabited, but most people (58%) live on the island of Java. The Indonesian population is forecast to rise from 250 million in 2013 to 282 million in 2025, placing heavy demands on the natural environment. Rapid urbanization will also place heavy strains on urban areas that are already highly congested and suffer from high levels of ambient and water pollution, and where basic systems of urban sanitation and solid waste management have yet to be developed. About 80% of Indonesia’s territory is prone to natural hazards and associated natural disasters, such as earthquakes, tsunamis, floods, and volcanic eruptions. Climate change is expected to increase the frequency and severity of these events.

24. Climate change is altering precipitation patterns, sea level, and atmospheric and ocean temperatures, and its impacts are already evident in the form of intense floods, droughts, and storm surges. Impacts are particularly severe in cities, in coastal and river areas, and threaten to directly affect the livelihoods of 42 million people who live in areas less than 10 meters above sea level.

25. Indonesia is the world’s third largest emitter of greenhouse gases, mainly because of the conversion of forests and carbon–rich peatlands to plantations. The annual deforestation rate decreased from 2.8 million ha in 1990 to an average annual rate of 690,000 ha (2005–2010) but still accounts for most of the greenhouse gas emissions (75%). Notwithstanding, emissions from non-forest sectors, including as a result of fossil fuel use, are expected to rise sharply. In September 2009 the government adopted the National Action Plan for Reducing Greenhouse

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14 Land area: 1.9 million square kilometers; coastal and marine waters: 5.8 million square kilometers; coastline: 109,000 kilometers.
Gas Emissions to reduce carbon dioxide emissions by 29% under a “business–as–usual” scenario by 2030.

26. Indonesia had 3 million ha of productive mangrove forests in 2009, and has rich seagrass beds. It is part of the Coral Triangle region, which is home to 75% of the world’s coral species and the greatest diversity of coral reef fish (2,057 species). Vulnerable coastal habitats continue to be threatened by various human activities.

27. **Air quality.** Air quality remains a concern in urban and industrial centers, and in areas affected by the haze of forest and peat fires. Air quality is the worst across Java and in the urban centers of Jakarta, Surabaya, Bandung, and Semarang, where pollutants exceed World Health Organization recommended maximums. The main sources of urban air pollution are transportation, fossil fuels used for electricity generation, industry, and indoor cooking fires. The largest non-urban air pollution problems are forest and peatland fires, which also impact neighboring countries. Other sources of non-urban air pollutants that need to be reduced include oil and gas flaring, burning of crop waste, electricity generation from coal, and industry.

28. **Water resources.** Indonesia has abundant water resources, but the water is not distributed evenly and is coming under increasing pressure from demands associated with agriculture, industry, and growing urban settlements. Population increase, economic growth, and climate change are likely to result in water shortages and reduce water quality, unless major improvements are made to better manage key watersheds and increase investment in sanitation, waste management, and control of industrial effluent.

H. **Business Environment**

29. **Weak competitiveness.** Indonesia’s position in the World Bank Group’s ranking of the overall ease of doing business improved to 109 in 2016 from 128 in 2009, but remains unfavorable compared to its regional peers: the People’s Republic of China (PRC) (84), Malaysia (18), Thailand (49), and Viet Nam (90). Effective implementation of policies for improving the private sector enabling environment are slower than anticipated, especially at the subnational level, owing to inconsistent and often arbitrary regulations imposed by local governments. The poor quality of Indonesia’s infrastructure, weaknesses in the legal system, regulatory uncertainty, taxes, skill shortages, and labor market issues continue to be perceived as major impediments to doing business. Increasingly, perception surveys suggest infrastructure—i.e. transport, electricity and telecommunications—have become the most serious obstacle to doing business. In response to this situation, and to attract new investment and spur economic growth, the government announced a series of economic reform packages to begin in September 2015 that focus on streamlining regulations, accelerating strategic projects, increasing predictability in wage setting, strengthening economic zones, and opening the economy to foreign investors.

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15 The Coral Triangle region includes Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor–Leste. The Coral Triangle is the global epicenter of abundant, biodiverse marine life.
17 Particularly a proliferation of local taxes.
18 More than two-thirds of Indonesia’s workers have not completed secondary school.
19 Doing Business 2015 (footnote 20, above) ranks Indonesia in the world’s bottom 20% in (i) starting a business, (ii) getting construction permits, (iii) paying taxes, and (iv) enforcing contracts.
30. **Shallow financial sector.** Indonesia’s financial sector, representing just over 70% of GDP, is small relative to other large Asian economies, such as Thailand (210% of GDP), India (300%), Malaysia (383%), and the PRC (500%). At the end of 2014, stock market capitalization in Indonesia was just 49% of GDP (compared to 160% in Malaysia), and outstanding debt securities were equivalent to 15% of GDP (compared to 120% in Malaysia). It is estimated that just 2% of the population use the capital market, and 40% do not have a bank account. Both the money and foreign exchange markets are thin. The lack of financial depth is also evidenced by limited product offerings and services.

31. The financial sector is also one of the least efficient in the region. In 2014, Indonesia’s real domestic lending rate averaged 11.8%, compared with 3.8% in Malaysia, 3.8% in the Philippines, 6.1% in Singapore and 2.3% in Thailand. High lending rates are related to a low level of domestic savings, high costs of domestic deposits, and inefficient financial intermediation.

**II. KEY IMPEDIMENTS TO INCLUSIVE AND SUSTAINABLE GROWTH**

**A. Macroeconomic Policy and External Vulnerability**

32. **Fiscal restraint versus growth.** Restoring macroeconomic stability through prudent fiscal and monetary policies has been central to the country’s economic recovery from the Asian financial crisis and to its resilience in response to more recent global economic turbulence and commodity shocks. Prior to 2015, the fiscal space to accommodate increased spending for infrastructure and social programs was also limited by the allocation of almost one-third of public spending to petroleum subsidies. The government’s fiscal room to maneuver has improved after significant fuel price adjustments in 2014 and 2015, but remains restrained, primarily because of a combination of a 3% regulatory ceiling on the fiscal deficit, and a tax-to-GDP ratio that has remained low (11% of GDP) and stagnant since 2009.

33. **External vulnerabilities.** Indonesia’s open economy, increased dependence on private capital inflows, and widening external imbalances make it vulnerable to external shocks. In 2013 and 2015, Indonesia witnessed sudden shifts in investor sentiment, leading to bouts of currency devaluation and capital outflows. Although these were brief, exchange rate volatility has raised business costs and weakened confidence. From 2005 to 2014, Indonesia’s export competitiveness, particularly in manufacturing, has gradually eroded. The consequent increase in the share of primary commodities in Indonesia’s exports has made its external accounts more vulnerable to cyclical swings in global commodity prices. Widening external imbalances combined with increased capital outflows have on occasions reduced the scope for easing monetary policy to spur economic activity. To ease pressure on the current account and ensure financial market stability, Bank Indonesia has tightened monetary policy when necessary, resulting in higher capital costs that led to lower domestic demand, private investment, and growth.

**B. Addressing Inequality**

34. **Drivers of inequality.** Poverty levels and rising inequality are both associated with a narrowly based economy and insufficient job creation. Since 2000, the majority of jobs that have been created are in low-productivity services. The agriculture and manufacturing sectors have

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both grown at a slower-than-average rate during 2011–2014. Growth in mining, industrial crops, timber, telecommunications, and financial services has accelerated since 2010, but ownership in these sectors remains highly concentrated, and investment is capital intensive. Consequently, recent economic growth has mostly benefitted the country’s wealthy and has created few good jobs. In the labor market the drivers of inequality are also related to skill shortages, low levels of regulatory compliance and limited collective bargaining.

35. Children in remote and rural areas tend to experience multidimensional inequality of opportunity; they are more likely than urban children to lack access to education, health, and transportation services. In rural areas, nearly two thirds of children lack access to at least one of these services; one third lack access to two, and another one third lack access to all three. By comparison, one third of all urban children lack access to at least one of these services, one fifth lack access to two, and only about one third lack access to all three. More importantly, physical access to facilities does equate with quality service provision; many facilities are under resourced and lack competent staff to enable professional administration.

36. Remaining weaknesses in the social protection system also makes it harder for households at the lower end of the income distribution profile to climb out of poverty. Since 1997, Indonesian households have faced many negative economic shocks, food price surges, and natural disasters. Risks specific to particular individuals or households are just as significant. These include loss of employment, illness and accidents, death of a spouse, and divorce. For many households, such a shock is sufficient to push them back into poverty.

37. The new national framework for poverty reduction. The national medium-term development plan (RPJMN) 2015–2019 focuses on making the growth process more inclusive. It targets closing the growing gap in consumption per capita between different income groups and regions while also reducing the incidence of hardcore poverty. Over the next 5 years, the government aims to boost the growth rate while fostering greater equity in opportunity and incomes between villages, border areas, and the country’s western and eastern regions. It also aims to open the economy to opportunities offered by the Association of Southeast Asian Nations (ASEAN) Economic Community and beyond. To create more job opportunities, the government will improve the investment climate for labor-intensive industries and small business. The government will improve connectivity and accelerate the development of basic infrastructure to support economic activity and sustainable livelihoods in rural and border areas. By increasing the resources available to local governments, and by steadily boosting social spending, the government is seeking to improve the delivery of basic social services such as education and health to the poor and vulnerable. The government will also introduce more comprehensive and better targeted social protection and social security programs, including greater use of conditional cash transfers and pension systems.

C. Infrastructure Gap

38. Infrastructure spending. Spending on infrastructure is extremely low. Indonesia’s infrastructure investment collapsed during the Asian financial crisis and has not fully recovered. Average annual infrastructure investment has been 4% of GDP in 2004–2014, compared to more than 7% in the mid-1990s. Cumulative underinvestment in infrastructure has resulted in logistics costs equal to 24% of exports, among the highest in the Asia and the Pacific region.

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22 Indonesia was the worst–hit country by the Asian financial crisis of 1997–1998. Indonesians have faced periods of high food prices, such as in 2005–2006, 2008, and 2010. Major natural disasters since 1998 include the 2004 tsunami in Aceh Province, earthquakes in several locations, and the 2010 eruption of Mount Merapi in Java.

According to the World Economic Forum, Indonesia ranked 56th out of 144 countries on the overall quality of infrastructure, compared with Malaysia (25th), the PRC (46th), and Thailand (48th) in 2014 (footnote 20). The unmet infrastructure need has been largely due to low public and private investment, a complex land acquisition process, poor project preparation, cumbersome and lengthy procurement systems, poor interagency coordination, and a budget release which occurs part way through the financial year.

39. **Energy shortfalls.** Indonesia’s energy sector is underperforming and may face a supply crisis in the medium term. Power demand outstrips supply in many parts of the national grid. Generation capacity additions have been delayed, there is significant electricity theft, and underinvestment and infrastructural deficits extend to the transmission and distribution systems. This severely constrains the country’s ability to provide power for industrial and commercial users, and to connect new households to the grid.\(^\text{24}\) Indonesia’s per capita annual consumption of electricity of about 700 kilowatt hours (kWh) is very low relative to regional peers such as Thailand (2,300 kWh) and Malaysia (4,000 kWh). Indonesia’s electrification ratio is 82%, versus almost 100% in Malaysia, the PRC and Thailand. Electricity production per capita in Indonesia is only 20%–60% of its peers. Poor infrastructure has been widely recognized as a leading constraint to doing business in Indonesia.

40. Energy services and consumption are oriented disproportionately toward Indonesia’s economic growth centers; extensive remote areas of the country still lack access to basic energy services. The predicted shortfall in generation capacity by 2019 is 35 gigawatts. Fossil fuels dominate Indonesia’s energy mix. Indonesia has significantly underutilized potential in conventional gas; obstacles to its use include high export obligations, low domestic prices, aging fields, an uncertain regulatory framework, and long distances between production and consumption centers. While Indonesia is particularly well endowed with a range of renewable energy resources—including geothermal, biomass, solar, and hydropower—renewables account for only 5% of the raw energy mix; the country lags behind regional peers in using renewables for power generation and transportation.

41. **Logistics costs.** Poor infrastructure causes high logistics costs. Indonesia’s economic infrastructure is ranked far below that of Malaysia and Thailand on the World Bank’s Logistics Performance Index.\(^\text{25}\) Congested ports and rising logistic costs are major constraints to the competitiveness of all sectors of the economy. High interisland transport costs push up the general cost structure, particularly in remote regions, and contribute to large interregional price differences. Regulatory constraints on competition and inefficient service provision compound the problems. The 2008 Shipping Law introduced cabotage principles that limit the movement of cargo between Indonesian ports to Indonesian-flagged vessels, adding to interisland shipping costs.\(^\text{26}\)

42. **Obsolete road network.** Given the limited number of, and access to, ports, airports, railways, and road-based logistics facilities, transport costs within Indonesia often exceed the costs of importing items from the PRC or Singapore. Although spending on road infrastructure was increased to approximately $6 billion per year in 2014, this has been insufficient to keep pace with the double–digit growth in the country’s vehicle fleet, leading to enormous congestion

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and rapidly rising transport costs. A public expenditure review of the road sector by the World Bank finds that 24% of provincial roads and 41% of district roads are in bad or poor condition.27

43. **Rural infrastructure.** Shifting public spending from agro-input subsidies to rural infrastructure can positively impact rural productivity in the long term. The rehabilitation and modernization of irrigation systems and the improvement of bulk water supplies would help improve productivity and incomes directly by boosting yields and cropping intensity. It is estimated that shifting land resources out of low-value food crops and into higher-value cash crops, and increasing smallholder yields, could contribute $95 billion in added value to the sector by 2030. Complementary actions to help boost smallholder yields would include higher spending on agriculture research and development, accelerated privatization of irrigation systems, greater use of information and communication technology-assisted agricultural extension, improved access to rural finance, more coordinated spatial planning for land use, and accelerated registration and land titling.28

44. **Land acquisition.** Acquiring land for public projects is notoriously difficult in Indonesia. The government has improved its land acquisition laws and taken steps to limit the time required for involuntary land acquisition. Ensuring that the new land laws are applied uniformly across the country remains a key challenge. Moreover, lack of clear land titles, multiple land maps, and the registration of some 70% of land as protected forest lands complicates the acquisition of land for infrastructure development.

45. **Urban development.** Urban infrastructure development is not keeping pace with the urban population growth, largely because of insufficient public investment. Urban water supply and sanitation are in the worst technical and financial condition. The potential economic loss due to inadequacies in the current sanitation systems alone have been estimated at $5.6 billion per year, or 2.3% of GDP.29 The governance arrangements for sanitation service delivery at the local government level are not well developed, with no clear service provider and no organization to regulate the equitable delivery of services. Although management, operations and maintenance of urban sanitation services are a local government responsibility, a wide range of management models are currently being used, with varying success. As of end 2014, 90% of the 496 local governments in Indonesia had a city sanitation strategy and program. The preparation process for the program has resulted in strong political support in many municipalities. Approximately half of the projects proposed in the programs are being implemented, and are mostly funded from regional and local budgets. The focus now needs to shift from planning sanitation programs to implementing these on a city-wide basis.

46. **Environmental services protection and climate change.** Sustainable management of natural resources is a high priority. Adapting to climate change will require a more integrated approach with greater enforcement of laws related to land management and improvements in the livelihoods of people living in fragile natural environments. Reducing emissions will require an active encouragement in the use of renewable energy resources and more effective efforts to combat deforestation. Air and water quality needs to be improved including through investments in infrastructure, improved regulation and greater enforcement of environmental standards.

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D. Human Capital

47. **Skill gaps.** There are now more than 30 million senior secondary graduates and more than 10 million tertiary education graduates in Indonesia’s labor force. From 2010 to 2015, the number of workers with a tertiary education has increased by more than 1 million annually, and those with a senior secondary education by more than 2 million annually. However, in some sectors, the education system is not providing enough graduates, while in others, those who graduate lack the correct skills and work in low-skill occupations. In 2015, 52% of the employed population were underqualified for their positions.

48. Demand for students with quality vocational and technical skills outstrips supply. Yet, of the 5.2 million students enrolled in more than 3,000 Indonesian higher-education institutions, less than 3% (just 110,000) receive polytechnic education, an extremely low proportion compared to other countries. McKinsey estimated that demand for semi-skilled and skilled workers may rise to 113 million by 2030, which is likely to see skills shortages and skills mismatches worsen throughout the economy (footnote 28). Society tends to view polytechnic education as a second-class alternative to university education. Gains in learning outcomes and labor productivity are needed to attract investors to create quality jobs.

E. Business Environment

49. **Attracting investment.** Indonesia has made progress in attracting investment, but significant challenges remain. The country introduced a one-stop service facility for investment licenses in 2015. A systematic mechanism needs to be established to simplify and remove inconsistent and overlapping regulations at various levels. In 2015, the government issued a number of new investment incentives to support new sectors and exports. Such incentives, where needed, must be non-distorting and transparent.

50. **Expanding the manufacturing sector.** Indonesia needs to create a greater diversity of exports to reduce dependence on primary commodities. International experience suggests that manufactured exports are much less volatile than commodity exports. Indonesia should take advantage of increased integration with economies in the region, as well as rising labor costs in the PRC, to attract inward investment into the manufacturing sector. In addition to closing infrastructure and skills gaps, and improving the overall investment climate, the government also needs to improve policies to help the manufacturing sector add greater value in the merchandise they produce. These include policies to (i) deepen manufacturing agglomeration areas and clusters, (ii) promote more predictable productivity–based wage increases, (iii) limit tax incentives for activities that will ultimately raise costs to the manufacturing sector, and (iv) accelerate improvement in the quality of human capital and research and development.

51. **Opening up trade in services.** While considerable progress has been made in opening up trade in goods, this is not the case for the services sector. Services trade is less than 7% of GDP, while the services sector contributes 44.7% to GDP; both are below ASEAN averages. The World Bank reports that services trade restrictiveness indices for Indonesia are high, suggesting there is significant potential for gains from opening up trade in services. Under the ASEAN Framework Agreement on Services, strong commitments have been made to open up the services sector and to ease restrictions on the mobility of skilled workers.

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52. Harnessing information and communications technology to enable disruptive technologies. New technologies are transforming the delivery of economic services worldwide. Substantial improvements in access to broadband internet services will be needed if Indonesia is to fully benefit from e-commerce and e-banking, and to take full advantage of new, disruptive technologies.

F. Public Sector Management

53. Public financial management. The 2012 Public Expenditure and Financial Accountability Report concludes that Indonesia has a well-functioning public financial management (PFM) system that is steadily improving and has increased transparency and independent oversight of public expenditures. However, some areas are still identified as a “work in progress”, including tax reform, budget execution, fiscal decentralization, and procurement.

54. Tax revenues. National-level efforts to increase tax revenue have had limited success, largely due to the narrowness of the tax base (particularly for personal income tax), legal restrictions on access to bank information by the tax authorities, over-dependence on the commodity sector, and inefficiencies in tax administration. At present, the central government tax revenue to GDP ratio is one of the lowest in the Group of Twenty and among emerging middle income economies, averaging just 10.9% of GDP between 2010 and 2015. To improve revenue collection, the Ministry of Finance has introduced e-tax filling and registration aimed at broadening the personal income tax base. At the sub-national level, the devolution of local taxes has created an opportunity to better link revenue collection with service delivery.

55. Budget implementation. The government has reformed its budget controls and reporting systems, and budget transparency has been enhanced, with key budget documents available on the internet. Regulatory reforms continue at the national and sub-national levels, although implementation has been difficult because of (i) problems in linking resource allocations and results, and in defining outputs and indicators; (ii) a lack of capacity, and of feedback from monitoring and evaluation into policy making and resource allocation; (iii) difficulties in aligning policy planning with organizational accountability; and (iv) the need to streamline documents for planning, budgeting, and monitoring and evaluation. To promote a more performance-based budget, the government has introduced a performance and accountability system for government agencies consisting of strategic plans, performance measures, and performance reports. These are combined into an annual performance accountability report for each government institution.

56. Public financial management at the subnational level. Indonesia has effectively devolved key expenditure and revenue functions to regional governments, with subnational governments assigned greater responsibilities. However, weak PFM capability at all tiers of subnational administration poses fiduciary and governance risks. The current fiscal transfer

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34 Group of Twenty (G20) is an international forum for the governments and central bank governors from 20 major economies.
mechanisms do not provide sufficient incentives for PFM improvement at subnational levels, as (i) fiscal transfers are not linked to improved performance in service delivery and financial management, (ii) increases in own-source funds are offset by a decrease in fiscal transfers, and (iii) current transfer principles are not adequately needs-based. Focus on building PFM capacity is critical to improved governance and to better public service delivery.

57. **Public procurement.** Progress has been made in Indonesia’s public procurement since 2003. The introduction of e-procurement has reduced delays in the completion of public works projects and strengthened competition among bidders, with an increasing number of successful bids submitted by bidders who are not based in the region where the work takes place. However, the key public procurement legislation still lacks a clear mechanism for handling disputes, clear sanctions for procurement procedures violations, and provisions authorizing the monitoring of procurement by civil society. Bidders and government staff are required to sign an integrity pact, but it amounts to no more than a vow (footnote 37). A more detailed procurement law that consolidates numerous presidential decrees is required.

G. **Finance Sector**

58. **Financial inclusion.** Only 21.9% of the poorest 40% of the Indonesian population has savings in a financial institution. Over 40% of the population does not borrow, with only 13.1% having borrowed from a financial institution. A sizeable share of the population is effectively excluded from the financial sector, with limited opportunities to accumulate savings or mitigate financial risks to their livelihoods from natural disasters and economic shocks. The main challenges in this area are (i) low access to financial services, (ii) impediments to the delivery and use of non-credit financial products and services, (iii) a low level of financial literacy, and (iv) weak consumer protection. Promoting financial inclusion presents an opportunity to help people save and diversify their economic activities, which is especially relevant for the very poor.

59. **Financial shocks.** Indonesia has an open capital account, with relatively large foreign holdings of bonds and equities, making the market vulnerable to the risk of sudden capital outflows. Indonesia has experienced sharp reversals in capital flows due to various external shocks. For example, in June 2013, there was a capital outflow of Rp15.76 trillion in the bond market, with foreign investors as net sellers. The price of credit default swaps increased by almost 60 basis points from 1 April to 31 July 2013. This instability increased the cost of borrowing, with the 10-year government bond yield increasing by 225 basis points during the same period. Indonesia’s capacity for managing financial shocks has steadily improved over

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35 The Indonesian fiscal transfer system consists of three main types of grants: (i) general allocation funds, determined by the amount of spending on personnel plus the “fiscal gap” of the particular district; (ii) special allocation funds, allocated to districts to focus on particular national priorities; and (iii) shared revenue funds, related to the generation of revenues from natural resources and taxes in the particular regions.

36 Under the Law 32/2004 on regional governments (decentralization), the Ministry of Home Affairs is responsible for supervising and regulating financial management by regional governments, while the Ministry of Finance is responsible for budget transfers, setting limits for cumulative loans and deficits, signing on-lending loans, and setting up regional finance information systems. Greater strategic cooperation and coordination is needed between these ministries; the laws defining the roles of both ministries are currently under review.


time. Within a few months of the 2013 shock, capital flows had normalized and the exchange rate had strengthened.

III. IMPLICATIONS FOR ADB COUNTRY ENGAGEMENT

60. Reducing poverty and combating inequality in Indonesia will require efforts to make the growth process more inclusive, and to nurture new sources of growth. Indonesia needs higher rates of economic growth, as well as growth that is more balanced regionally, and is driven by private investment in activities that are globally competitive. This will require addressing Indonesia’s infrastructure and skills deficits, and narrowing the gap between rural and urban productivity to shift the large numbers of poor and near-poor into the middle class. Climate change must be addressed, while increasing population and urbanization pressures require reversing a legacy of resource degradation.

61. Through public and private spending, the government aims to initiate investment of approximately $425 billion in new infrastructure development during 2015–2019, with 30% expected to be financed by the private sector, and through PPPs; 50% through national and subnational government budgets; and 20% by state-owned enterprises. The infrastructure development effort will involve a near doubling of power generation, toll roads, and port facilities. Rehabilitating 3 million ha of irrigation systems, and opening an additional million ha of new irrigated lands is also needed. Extending broadband information and communication technology to all cities and regions, and building 1 million new houses is also planned.

62. The government will continue to address several policy reform areas relating to public sector management, such as modernizing budget, treasury and debt management while also improving the results-orientation in state budget planning and development. This will require strengthening monitoring and evaluation. Strengthening public procurement systems, audit and anticorruption efforts are also planned. Delivering the growth targets, poverty reduction and equality targets in the RPJMN will require further efforts to enhance domestic and foreign investment directly and through deepening the capital markets. It will also require the expansion of financial services to facilitate financial inclusion in Indonesia’s growth.

63. The RPJMN education reform program covers all subsectors from early childhood education to higher education, and with the overall aim of improving the quality and relevance of the learning process. Compulsory education will be extended to a 12-year program. Access to technical and vocational education will be increased. Access to universal health insurance will be enhanced through better use of technology, increased spending and improved delivery systems at the local level.

64. Support for the development and implementation of government-led infrastructure, and public financial management programs can help improve the efficiency and effectiveness of scarce public spending. Support for improvements in economic governance, through government-led reform programs, can help encourage better use of public resources while encouraging the private investment that is needed to support higher growth rates, and the creation of new jobs. Ensuring that ADB support is knowledge based and draws on skills and talents from across the organization will help Indonesia identify and adopt good regional practices to address the nation’s diverse development challenges.