

West and central Asia	
(Afghanistan, portions of Russia, Iran, portions of Turkey, Syria, Iraq, Kuwait, Saudi Arabia, Qatar, United Arab Emirates, Oman, Yemen)	
Temperature	Increase of 0.4-2.5°C, with most warming in central Asia Temperature increase 2-6°C Mid-term (2046–2065): increase of 2-4°C, with the warmest temperature located in the central portion (Iraq, Saudi Arabia, Iran). Long-term (2081–2100): increase of 4-6°C, fairly evenly spread throughout the region.
Precipitation	Decrease in overall precipitation :Overall, annual precipitation is projected to decrease across most of the region, except in the northern portion and the far southern portion (Saudi Arabia, Yemen). Decrease in cloudiness and humidity in the northern portion of the region (Afghanistan, Russia, Iran, Turkey, Syria, Iraq, Iran) and an increase over the southern portion of the region (Saudi Arabia, Yemen, Oman, Qatar, United Arab Emirates). Decrease in annual mean soil moisture of up to -2 mm across much of the western portion of the region (Turkey, Russia, Syria, Iraq, Iran) with small increases projected for the southern portion of the region (Saudi Arabia, Yemen).
Water resources	Increase drought duration/ negative impacts on agriculture. Increased water stress with impacts on freshwater availability and agricultural production. Increased drought duration.
Food security	Increased drought and water stress due to precipitation declines during the already dry season. Decreased food security and exacerbated malnutrition due to greater climatic variability. Increase in irrigation demand but uncertain flow from some rivers, such as the Euphrates and Tigris (Syria, Iraq, Turkey). Fish and their habitats will be affected in already overfished areas, especially in the Persian Gulf (Iran, Saudi Arabia). Increased stress to over 1 billion people worldwide that rely on fish as their main animal protein source, especially in developing nations. Increased conflicts associated with food insecurity. Increased heat stress will likely have negative impacts on animal health and food production.
Human health	Warmer maximum temperatures and heatwaves will increase mortality, especially in vulnerable populations. Potential increase in the distribution of vector-borne infectious diseases such as malaria. Increased malnutrition and consequent disorders, including those relating to child growth and development will likely be more common in more vulnerable countries.
Sea level rise	Sea-level rise will extend areas of salinization of groundwater, decreasing freshwater availability in coastal areas. Increased salt water intrusion into lagoons, affecting inland fisheries and aquaculture.
Biodiversity	Up to 50% of Asia’s total biodiversity is at risk due to climate change. Negative impacts to marine ecosystems which provide goods and services such as fisheries, provision of energy, recreation and tourism, carbon dioxide sequestration and climate regulation. Increased forest success largely due to carbon dioxide fertilization may occur in places such as Turkey but with uncertain ecosystem changes. Increased risk of extinction of montane species throughout the mountainous regions.

East Asia and Tibetan Plateau	
(Portions of Russia, Mongolia, China, North Korea, South Korea, Japan, Taiwan, portions of Vietnam, portions of Burma)	
Temperature	Increase of 0.4-2.5°C, with most warming in the northern portion (North Korea, Mongolia, northern China). Temperature increase 2-5°C. Mid-term (2046–2065): increase of 2-3°C, warmest temperatures are located in the northwestern portion (Russia, China, Mongolia). Long-term (2081–2100): increase of 3-5°C.
Precipitation	Overall, annual precipitation is projected to increase across the region. Decrease in cloudiness, except from the eastern china: Decrease in cloudiness and humidity over most of the region, but especially in the eastern portion (Japan and Sea of Japan) with a slight increase in cloudiness over eastern China. Increase in annual mean soil moisture of up to 1 mm in the western portion of the region (China) and a decrease in annual mean soil moisture of -2 mm in the southeastern portion of the region (China, portions of Vietnam, portions of Burma) and in the north portion (Japan, China, North Korea, Mongolia). Increase of up to 40% in annual runoff in the northern portion (northern China) and decrease of -10% for the southern portion (southern China).
Water resources	Increasing frequency and intensity of droughts leading to more serious and frequent salt-water intrusion in the estuaries. Increased precipitation during the wet season (December – February), resulting in more flooding risks but with more water shortages in the dry season. Decrease in minimum monthly flows of 17 to 24% in the Mekong basin and 26 to 29% in the delta. Increased susceptibility of salt water intrusion into groundwater and surface water resources, especially along the coast of China due to sea level rise. For example, rising sea levels of 0.4 to 1.0 m can induce salt-water intrusion 1 to 3 km further inland in the Zhujiang estuary, China. Earlier snow cover melt in North-West China and Western Mongolia leading to more floods in spring, more shortages in autumn and changes in the water availability for livestock.
Food security	Decrease food security and issues with rice production in Japan and china: Decreased rice yields of 0 to 40% in central and southern Japan and increased heat-induced floret sterility. Decreased grain production of 26% and fodder production of 9% in the northern portion of the region. Decrease of 5 to 12% of rain-fed rice yield in China with a 2°C increase in mean air temperature. Suitable land and production potentials for cereals could marginally increase in Russia and in East Asia.
Human health	Human health threats increase, risk of dengue fever (China), heat stress, climate-induced mortality (especially in china), Japanese cedar pollen disease, water-borne disease (dermatosis, cardiovascular disease and gastrointestinal disease) caused by pollution, cholera, diarrheal diseases.
Sea level rise	Projected sea-level rise could flood the residences of millions of people living in the low lying areas of South, South-East and East Asia such as in Vietnam and China. For 1 m sea-level rise with high tides and storm surges, the maximum inundation area is estimated to be about 1.2% of total area of the Korean Peninsula with up to 4.1 million people at risk (Mimura and Yokoki, 2004). In China, a 30 cm sea-level rise would inundate 81,348 km ² of coastal lowlands. With projections for increased tropical cyclone destructive potential and increasing coastal populations, substantial increase in hurricane-related losses is likely in the 21st century.
Biodiversity	Up to 50% of Asia's total biodiversity is at risk due to climate change. About 90% of the suitable habitat for one of Japan's dominant forest species, beech tree, could disappear by the end of this century.

	South Asia
	(Pakistan, India, Nepal, Bhutan, Bangladesh, Burma, portions of China)
Temperature	Increase of 0.4-0.8°C, with most warming in the western portion (Pakistan and western India). Temperature increase 2-5°C. Mid-term (2046–2065): increase of 2-3°C, warmest temperature focused in the northern portion (Nepal, Bhutan, southern China, northern India, Pakistan). Long-term (2081–2100): increase of 3-5°C, warmest temperatures focused in the northern portion (Pakistan, northern India, southern China, Nepal, Bhutan).
Precipitation	Overall, annual precipitation is projected to increase across most of the region. Increase in cloudiness and humidity over most of the region, but especially in the western portion (Pakistan, India) with a slight decrease in cloudiness over Nepal. Increase in annual mean soil moisture of up to 1 mm across much of the southern and western portion of the region (Pakistan, India, Bangladesh) and a sharp decrease in annual mean soil moisture of -0.8 to -1.6 mm in the northeastern portion of the region (Nepal, China, Bhutan). Large increase in annual runoff (upwards of 40%), mostly in the western region (Pakistan, India).
Water resources	Increased number of people living under severe water stress and the expansion of areas under severe water stress in South and Southeast Asia. For example, 120 million to 1.2 billion, and 185 to 981 million people will experience increased water stress by the 2020s, and the 2050s, respectively. Climate change-related melting of glaciers could seriously affect half a billion people in the Himalaya-Hindu-Kush region and a quarter of a billion people in China who depend on glacial melt for their water supplies. Continued melting glaciers and increased runoff will lead to more flood risk, substantial reductions in dry season flow, and will negatively impact downstream agriculture, which relies on this water for irrigation. Increasing salinity of groundwater and surface water resources, especially along the coast in India, China and Bangladesh, due to sea level rise and droughts. Increasing frequency and intensity of droughts will lead to more serious and frequent salt-water intrusion in the estuaries. Increased water stress during critical seasons (December – February) and more intense rain occurring over fewer days in India.
Food security	Overall decrease in food security In Bangladesh, production of rice and wheat might drop by 8% and 32%, respectively, by the year 2050. 2 to 5% decrease in yield potential of wheat and maize for a temperature rise of 0.5 to 1.5°C in India. Decreased yields of non-irrigated wheat and rice will be significant for a temperature increase of beyond 2.5°C incurring a loss in farm-level net revenue of between 9% and 25%. The net cereal production in South Asian countries is projected to decline at least between 4 to 10% by the end of this century. Increased frequency of El Niño events would likely lead to declines in fish larvae abundance in coastal waters of South and Southeast Asia.
Human health	Increased risk of diarrhea and malnutrition in Southeast Asian countries including Bangladesh, Bhutan, India, Myanmar and Nepal. Possible reduction in diarrhea and malnutrition in the southern states in India. Climate-induced reduction in protein content of grains and a reduction of food availability could lead to a 35% increase in childhood stunting by 2050. Warmer sea-surface temperatures along coastlines of South and Southeast Asia would support higher phytoplankton blooms and these habitats could lead to the increased spread of infectious bacterial diseases such as cholera. Precipitation increase, frequent floods and sea-level rise in the future will degrade the surface water quality and lead to more pollution and more water-borne infectious diseases such as dermatosis, cardiovascular disease and gastrointestinal disease. More water-borne diseases including cholera and the suite of diarrheal diseases caused by organisms such as Giardia, Salmonella and Cryptosporidium.
Sea level rise	Projected sea-level rise could flood the residences of millions of people living in the low lying areas of South, Southeast and East Asia such as in Vietnam, Bangladesh, India and China. Sea-level rise-induced erosion will increase and thus lead to more shoreline degradation and higher protection costs. For example, a 30 cm rise in sea level can result in 45 m of landward erosion in some coastal areas of Asia. Sea level rise of 40 cm will increase the annual number of people flooded in coastal populations from 13 million to 94 million and almost 60% of this increase will occur in South Asia (along coasts from Pakistan, through India, Sri Lanka and Bangladesh to Burma). A 1 m rise in sea level could put up to 4.1 million people at risk. Increase in the destructive potential of tropical cyclones, and an increasing coastal population mean substantial increase in hurricane-related losses in the 21st century is likely.
Biodiversity	Increased frequency and intensity of extreme weather events will negatively impact aquatic ecosystems, and existing habitats will be redistributed, affecting species. Up to 50% of Asia's total biodiversity is at risk due to climate change.

	Southeast Asia
	(Laos, Vietnam, Cambodia, Thailand, Malaysia, Indonesia, portions of Burma, Philippines, Papua New Guinea, Brunei)
Temperature	Increase of 0.4-1°C, fairly evenly spread across the region. Temperature increase 1.5- 4°C. Mid-term (2046–2065): increase of 1.5 - 2°C, warmest temperatures are concentrated in the northwestern portion (Thailand, Burma, Laos, Cambodia, Vietnam). Long-term (2081–2100): increase of 2-4°C, fairly evenly spread across the land masses
Precipitation	Overall, annual precipitation is projected to increase across most of the region with the exception of the southwest corner, where it is projected to decline (southwestern Indonesia). Decrease in cloudiness and humidity over most of the region . Increase in annual mean soil moisture of up to 1 mm in the southwestern portion of the region (Papua New Guinea) and a decrease of 0.6 mm in the western portion of the region (Laos, Vietnam, Cambodia, Thailand, Malaysia, portions of Indonesia, portions of Burma). Relatively small increases (10 to 20%) of annual runoff across most of the region to 981 million people will experience increased water stress by the 2020s, and the 2050s, respectively.
Water resources	Increasing frequency and intensity of extreme events, such as flooding and droughts will impact many southeast Asian countries. Increased number of people living under severe water stress and the expansion of areas under severe water stress in South and Southeast Asia.
Food security	Overall decrease in food security (decrease in cereal production, crop production, fisheries) Substantial decreases in cereal production potential in Asia could be likely by the end of this century. Loss of about 12% of crop production due to inundation and salinity intrusion in the Mekong Delta, which produces around 50% of Vietnam’s total agricultural production, is estimated with a sea-level rise of 30 cm (occurring as early as 2040). Potential increases of some crop yield production in East and Southeast Asia, but potentially substantial losses in rain-fed wheat in the same regions. Decreased net cereal production of 4 to 10% by the end of this century for south Asian countries. Large-scale changes of skipjack tuna habitat in the equatorial Pacific under projected warming scenario. Increased frequency of El Niño events would likely lead to declines in fish larvae abundance in coastal waters of South and Southeast Asia. Increased vulnerability of aquaculture, agriculture, and marine capture fisheries due to sea-level rise, increases in tropical cyclone intensity, and saltwater intrusion.
Human health	Increased risk of diarrhea and malnutrition in Southeast Asian countries including Bangladesh, Bhutan, India, Myanmar and Nepal. Warmer sea-surface temperatures along coastlines of South and Southeast Asia would support higher phytoplankton blooms and these habitats could lead to the increased spread of infectious bacterial diseases such as cholera. Precipitation increase, frequent floods and sea-level rise in the future will degrade the surface water quality and lead to more pollution and more water-borne infectious diseases such as dermatosis, cardiovascular disease and gastrointestinal disease. Increased flooding and sea-level rise could also contaminate drinking water, which would then lead to more water-borne diseases including cholera and the suite of diarrheal diseases caused by organisms such as Giardia, Salmonella and Cryptosporidium.
Sea level rise	Projected sea-level rise could flood the residences of millions of people living in the low lying areas of South, Southeast and East Asia such as in Vietnam, Bangladesh, India and China. Sea-level rise-induced erosion will increase and thus lead to more shoreline degradation and higher protection costs. For example, a 30 cm rise in sea level can result in 45 m of landward erosion in some coastal areas of Asia. 1 m rise in sea level could put up to 4.1 million people at risk . Increase in tropical cyclone destructive potential, and with an increasing coastal population substantial increase in hurricane-related losses in the 21st century is likely northwestern portion (Thailand, Burma, Laos, Cambodia, Vietnam).
Biodiversity	Loss of up to 88% of coral reefs in Asia during the next 30 years and a high risk of annual bleach events occurring by 2030. Up to 50% of Asia’s total biodiversity is at risk due to climate change. Increased forest fires associated with rising temperatures and seasonal droughts in Southeast Asia.