ID	indicator	description
ID_FOOD_01	projected change of cereal yields	Projected amount that climate change is predicted to change food supply by mid-century for three staples: rice, wheat and maize. The projections of the yield productions are obtained from five crop models (EPIC, GEPIC, LPJmL, pDSSAT, PEGASUS), and it assumes effect of CO_2 fertilization but does not adjust for changes in farming systems or irrigation.
ID_FOOD_02	projected population change	An indication of food demand by the mid-century. The projection data are from the World Bank Health Nutrition and Population Statistics (HNPStats)which provides country-level projection of population up to 2050.
ID_FOOD_03	food import dependency	Proportion of cereal consumption obtained from imports. The definition of cereal is from FAO referred as "crops harvested for dry grain only", including wheat, rice, barley, maize, popcorn, rye, oats, millets, sorghum, buckwheat, quinoa, fonio, triticale, canary seed, mixed grain, and remaining types (FAO, n.d.). Cereal consumption is equal to production and imports minus exports.
ID_FOOD_04	rural population	This measure includes all people living in the rural regions of a country.
ID_FOOD_05	agriculture capacity	A combination of four indicators of agricultural technology: capacity to equip agriculture areas with irrigation, N+P205 total fertilizer use on arable and permanent crop area use, pesticide use, and tractor use. The irrigation measure obtained from FAO indicates the proportion of agriculture areas equipped with irrigation, but does not measure the amount of land that is indeed been irrigated in a specific year. Therefore, it is a capacity measure. The fertilizer and pesticide measures are the total consumption of the active ingredients (for both fertilizer and pesticide) as the reported sum divided by hectare. The tractor use measures the number of wheel and crawler tractors used in agriculture. Together, these measures are combined into an indication of the accessibility of agriculture technological inputs.
ID_FOOD_06	child malnutrition	A measure of malnutrition based on the precent of under-5-year-olds with a low weight for height ratio; usually taken as a good indicator of chronic malnutrition. An assumption is taken for this indicator that OECD countries have a default child malnutrition rate of 0.
ID_WATE_01	projected change of annual runoff	An indication of how climate change will bring changes to annual surface water resources by the mid of the century. Projected surface runoff data, defined as precipitation minus evapotranspiration and change in soil moisture storage, are provided by Aqueduct at World Resource Institute. Aqueduct

		uses the ensemble of six global circulation models (GCMs) from Coupled Model Intercomparison Project Phase 5 (CMIP5) chosen to represent a broad diversity of models that best reproduce the mean and standard deviation of recent stream flow records in 18 large river basins (Alkama et al., 2013). The database covers 14998 catchments derived from the Global Drainage and Basin Database.
ID_WATE_02	projected change of annual groundwater recharge	An indication of how climate change will bring changes on annual groundwater resource by mid-century. GWR data are provided by Goethe University Frankfurt (Portmann et al., 2013).
ID_WATE_03	fresh water withdrawal rate	The proportion of total actual renewable water resources (including desalinated water) that is withdrawn in a specific year
ID_WATE_04	water dependency ratio	The proportion of the total renewable water resources originated outside the country, including the surface water and ground water entering the country or secured by treaties.
ID_WATE_05	dam capacity	An indication of the capacity to adjust to the changing (temporal and geographical) distribution of freshwater resources, including changes due to climate change. It is a measure of the per capita dam storage capacities within one country, calculated by the per capita theoretical initial capacities of all dams, which does not allow for changes over time due to siltation.
ID_WATE_06	access to reliable drinking water	Commonly used indicator of the capacity to deliver reliable domestic water supplies. The drinking water sources are considered reliable if they have a household connection, public standpipe, borehole, protected well or spring, or rainwater collection.
ID_HEAL_01	projected change of deaths from climate change induced diseases	An indication of the climate change impacts on several types of diseases. The indicator is a model-based estimate of the quality-adjusted loss of life years under several different climate scenarios. Disability adjusted life year (DALY) due to malaria, an indication of the climate change impacts on vector borne diseases, is excluded because more specific models have been used to project such impacts and it is assessed by another ND-GAIN indicator, the projected change of length of transmission season of vector-borne diseases
ID_HEAL_02	projected change in vector-borne diseases	This indicator takes the projection of malaria LTS as an indication of the climate change impacts on vector-borne diseases. LTS data were taken from projections (Caminade, et al., 2014) that took the ensemble mean of malaria LTS over four malaria models and five GCMs. However, the incidence of vector-borne diseases is also strongly dependent on the quality

		of public health systems. In this indicator the WHO estimated number of malarial cases per 1000 population per month of current LTS is used as a measure of these services.
ID_HEAL_03	dependency on external resource for health services	The percentage of external resources (e.g. bilateral payments, NGO operations etc.) in total national health expenditure.
ID_HEAL_04	slum population	A slum household is defined as a group of individuals living under the same roof lacking one or more of life-supporting facilities: access to improved water, access to improved sanitation, sufficient-living area, or durability of housing. Tenure is included as a 5th element, but insufficient data is available (MDG, n.d.).
ID_HEAL_05	medical staff	Sum of the number of physicians, nurses and midwives per 1000 population in the country. Increases in physicians, nurses, or midwives will have the same effect on the indicator.
ID_HEAL_06	access to improved sanitation facilities	Commonly used indicator of the capacity to control infectious diseases. The indicator is a proportion of the population with access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta.
ID_ECOS_01	projected change of biome distribution	An indication of how climate change will impact the change of terrestrial biome biodiversity within a country by the end of the century. Data were taken from the global version of a dynamic vegetation model (MC1) (Gonzalez et al., 2010).
ID_ECOS_02	projected change of marine biodiversity	An indication of how climate change will impact the change of marine biodiversity in a country's exclusive economic zones by mid-century. It is a measure based on projected changes in the distribution of 1066 exploited species of marine fish and invertebrates under climate envelope scenarios based on A1B scenarios (Cheung et al., 2009).
ID_ECOS_03	natural capital dependency	Based on the World Bank's Natural Capital Accounting project. This indicator of the strength of the dependency of social systems on ecosystem goods and services is based on the deployment of natural capital in national accounting, including national income and savings in the form of all assets and capital goods that are inputs to economic well-being (The World Bank, 2011). The natural capital related to ecosystem services includes: crop, pasture, forest (timber), forest (non-timber) and protected areas. Sub-surface capital such as oil, gas and mineral reserves are not included.
ID_ECOS_04	ecological footprint	The ecological footprint estimates the number of hectares of land and water, both within and outside the country, that are needed to meet the average demand on ecosystems services by the population's lifestyle. This is compared with the estimated capacity of a country's ecosystems to regenerate and maintain

		ecosystem services for either internal use or export. This indicator uses the surplus or deficit of capacity to cover the demand within each country.
ID_ECOS_05	protected biome	Taken directly from the Yale Environmental Performance Index (EPI), the indicator "assesses the protection of biomes weighted by the proportion of a country's territory the biome occupies." EPI defines the indicator as follows: "It measures the degree to which a country achieves the target of protecting 17% of each terrestrial biome within its borders, weighted by the domestic contribution of each terrestrial biome… All biome protection percentages were capped at 17% so that higher protection in one biome cannot be used to offset lower protection in another."
ID_ECOS_06	engagement in international environmental conventions	An indicator based on the country's participation in international forums, which is an indicator of its capacity to engage in multilateral negotiations and to reach agreement on appropriate actions internally.
ID_HABI_01	projected change of warm periods	An indication of the probability of extreme heat under climate change by mid-century. This indicator uses the Warm Spell Duration Index (WSDI), which defines periods of excessive warmth using a percentile-based threshold calculated for a calendar 5-day window in the base period 1961-1990. WSDI counts the number of days in a year when daily maximum of near surface temperature exceeds the 90th percentile threshold for 6 consecutive days or longer (Alexander, et al., 2006; Sillmann, et al., 2013b).
ID_HABI_02	projected change of flood hazard	Flood hazard is measured by the predicted, monthly maximum precipitation in 5 consecutive days (rx5day). Rx5day is defined as monthly maximum consecutive 5-day precipitation. It is a measure of precipitation extreme under climate change, a risk factor for flood hazard (Kundzewicz & Schellnhuber, 2004).
ID_HABI_03	urban concentration	Urban concentration measures both concentration of a country's population within cities (i.e. the degree of urbanization in general) and concentration of the urban population within a small number of large population (cities of 750,000 inhabitants or more) centers via the Herfindahl Index (Henderson, 2000; Van Eck &Koomen, 2008).
ID_HABI_04	age dependency ratio	An indication of the size of the vulnerable population in terms of ages. This indicator considers the population under 14 or above 65 as the vulnerable group.
ID_HABI_05	quality of trade and transport infrastructure	Logistics professionals' perception of country's quality of trade and transport related infrastructure (e.g. ports, railroads, roads, information technology), on a rating ranging from 1 (very low) to 5 (very high). Scores are averaged across all respondents.

ID_HABI_06	paved roads	Proportion of the total length of the roads that are paved. Paved roads are those finished with macadamized crushed stone, bitumen or equivalent, concrete or cobblestones and expressed as a percentage of the stated length of the public road system.
ID_INFR_01	projected change of hydropower generation capacity	An indication of the potential risk of hydropower generation capacity weighted by the importance of hydropower to one country, i.e. the proportion of the electricity production from hydroelectric sources. The data of the projected change are available at the sub-continental level, drawn from (Hamududu & Killingtveit, 2012).
ID_INFR_02	projected change of sea level rise impacts	An indication of how coastal infrastructure will be impacted by the combined effect of sea level rise and potential storm surge by the end of the century. The indicator considers the proportion of land areas, adjacent to the ocean, that are lower than the projected sea level rise and the average height of storm surge.
ID_INFR_03	dependency on imported energy	A measure of the percentage of total energy use that is imported and thus not fully within a country's control. Energy use refers to the use of primary energy before transformation to other end-use fuels, according to WDI, equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.
ID_INFR_04	population living under 5m above sea level	The proportion of the population living in the area where elevation is 5 m or less. It is a simple measure of the population sensitive to coastal risks.
ID_INFR_05	electricity access	The proportion of the population with access to grid-power.
ID_INFR_06	disaster preparedness	An indication of capacities to deal with climate-related nature disasters. This indicator uses monitoring from the Hyogo Framework Action (HFA). The HFA outlined an action plan from 2005 to 2015 to establish five priorities for disaster preparedness. Countries are monitored in two-year intervals against the five priorities by self-reported data.
ID_ECON_01	doing business	The indicator took the World Bank Doing Business (DB) indicators as an indication of how countries are capable of attracting adaptation investment. The index assesses the investment climate in 10 topics using 40 indicators. The 10 topics are: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency.
ID_GOVE_01	political stability and non-violence	An indicator directly from the World Governance Indicators (WGI), "capturing perceptions of the likelihood of political

		instability and/or politically-motivated violence, including terrorism."
ID_GOVE_02	control of corruption	An indicator directly from the World Governance Indicators (WGI), "capturing perceptions from firms and households survey respondents and public, private, and NGO sector experts worldwide of public power exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests."
ID_GOVE_03	regulatory quality	An indicator directly from the World Governance Indicators (WGI), "capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development."
ID_GOVE_04	rule of law	An indicator directly from the World Governance Indicators (WGI), "capturing perceptions from firms and households survey respondents and public, private, and NGO sector experts worldwide of confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence."
ID_SOCI_01	social inequality	The country's poorest quintile's share in national income or consumption.
ID_SOCI_02	ICT infrastructure	A composite indicator from 4 sub-indicators that consider both the access to and the use of ICT infrastructure: mobile phone subscription per 100 persons, fixed phone subscription per 100 persons, fixed broad-band subscription per 100 persons, and percent of individuals using internet. Data for all four are available from the annual ICT Development Index (IDI) database. The mobile phone subscription measures the subscription to public mobile services including the post-paid and prepaid subscriptions (World Development Indicators, 2014). The fixed phone subscription is assumed to measure of the active number of analog fixed telephone lines, ISDN channels, fixed wireless (WLL), public payphones and VoIP subscription (International Telecommunication Union, 2010). The fixed broad-band subscription refers to the number of broadband subscribers with a digital subscriber line, cable modem, or other high-speed technology (World Development Indicators, 2014). The individual internet use measures the proportion of internet users with access to the worldwide network (World Development Indicators, 2014).
ID_SOCI_03	education	A measure of enrolment in tertiary education to represent the education level of a country. It is approximated by the ratio of the enrollment in tertiary education (regardless of age) to the

		population of the age group that officially corresponds to tertiary education attendance.
ID_SOCI_04	innovation	A measure of the number of patent applications, filed through the Patent Cooperation Treaty procedure or with a national patent office, by residents per capita.