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Goal	Description	Do African RREs/NREs contribute Directly to this Goal?	Do African RREs/NREs contribute indirectly to this Goal?
1	End poverty in all its forms everywhere	No	No
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	No	Yes
3	Ensure healthy lives and promote well-being for all at all ages	No	Yes
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Yes	Yes
5	Achieve gender equality and empower all women and girls	Yes	Yes
6	Ensure availability and sustainable management of water and sanitation for all	No	Yes
7	Ensure access to affordable, reliable, sustainable and modern energy for all	No	No
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Yes	Yes
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Yes	No
10	Reduce inequality within and among countries	No	No
11	Make cities and human settlements inclusive, safe, resilient and sustainable	No	No
12	Ensure sustainable consumption and production patterns	No	No
13	Take urgent action to combat climate change and its impacts	Yes	Yes
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	No	Yes
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	No	Yes
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	No	No
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	Yes	No



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	No			No		
1.2	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	No			No		
1.3	Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	No			No		
1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	No			No		
1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	No			No		
1.a	Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions	No			No		
1.b	Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
2.1	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	No			Yes	NRENs provide advanced research infrastructure and services to institutions and research centres that work on food sustainability and agriculture related projects.	<p>1) KENET Virtual Lab supports related research to preserve vital food source in Kenya (https://www.inthefieldstories.net/preserving-a-vital-food-source-with-the-help-of-advanced-research-infrastructure/)</p> <p>2) The Norwegian College of Fishery Science held lectures for the student of the City University of Mogadishu on how to make use of marine resources. The lessons use the connectivity provided by the regional REN. (https://www.inthefieldstories.net/bridging-7000-km-to-teach-fisheries-management/).</p> <p>3) NRENs support connectivity needs for The Digital Earth Africa platform addressing some of Africa's greatest sustainability challenges, i.e. food insecurity. (https://www.inthefieldstories.net/the-power-of-earth-observation/)</p> <p>4) Thanks to the connectivity provided by MoReNet, Mozambique National Institute of Meteorology has improved the tasks of collecting, transferring and processing weather information, and in turn, the forecasting process. The weather information obtained is widely used for decision-making, mitigating the effects of disasters, forecasting cyclones and floods, planning agricultural crops and deep sea fishing, etc.</p>
2.2	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	No			No		
2.3	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	No			No		
2.4	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	No			Yes	End users, such as researchers and scientists working on food sustainability challenges, make use of NREN's connectivity to access the information they need, such as satellite data, for their work.	<p>1) Th IIRF-SIC laboratory of the Ibn Zohr University connected through the Moroccan NREN MARWAN created thematic maps of the Agadir region using remote sensing and GIS technology to help land management authorities take action to protect the area. (https://www.inthefieldstories.net/mapping-the-landscape-managing-the-future/)</p> <p>2) NRENs support connectivity needs for The Digital Earth Africa platform, collecting information about ground cover, crop health and coastal environments, and this helps support sustainable farming practices. (https://www.inthefieldstories.net/using-satellite-imagery-to-solve-real-world-problems/)</p>
2.5	By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	No			No		
2.a	Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	No			Yes	NRENs provide connectivity services to research centres and institutions working on enhancing agricultural productive capacity.	KENET Virtual Lab, which supports related research to preserve vital food source in Kenya and maintain sustainable growing methods of cassia plant, is a joint initiative between Kenya, Uganda and Tanzania. This initiative makes use of the NRENs' advanced cloud technology. (https://www.inthefieldstories.net/preserving-a-vital-food-source-with-the-help-of-advanced-research-infrastructure/)
2.b	Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round	No			No		
2.c	Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	No			No		
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	No			No		
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	No			Yes	NRENs connect and provide internet services to various hospitals and research institutes working on combatting health diseases. Internet connectivity results in better administration, and aids in the provision of services such as remote scanning and operation of patients.	1) RENU has provided internet connectivity to a hospital facility in Kyabirwa Uganda enabling remote surgery and training. (https://africconnect3.net/renu-powers-surgical-operations-in-uganda/) 2) RENU donated network equipment to UVRI to help the institute cope with increased bandwidth needs. UVRI is one of the leading infectious diseases research facilities in Sub-Saharan Africa and contributed greatly to Uganda's fight against COVID-19. (https://twitter.com/RENU_256/status/154242199403003904).
3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	No			No		
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	No			No		
3.6	By 2020, halve the number of global deaths and injuries from road traffic accidents	No			No		
3.7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	No			No		
3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	No			No		
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	No			No		
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	No			No		
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all	No			No		
3.c	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	No			Yes	NRENs provide connectivity to schools in the health sector which contribute to the development and training of the health workforce.	In september 2021, TENET began the rolling out eduroam for medical staff and students. (https://www.tenet.ac.za/news/rolling-out-eduroam-for-medical-staff-and-students)
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	No			No		
4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	No			No		
4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	Yes	NRENs provide education establishments with affordable and reliable connectivity and services. Lower connectivity prices and user-dedicated services help education institutions provide a better experience and foster more opportunities for the students. Many of these services have also been made available off-campus (especially during the COVID-19 pandemic), which enables a more inclusive access to education for African students and researchers.	<ol style="list-style-type: none"> 1) ZAMREN offered Moodle to their institutions in Zambia, helping lecturers and students sustain teaching and learning during COVID-19. (https://africonnect3.net/zamren-installs-moodle-offers-free-hosting-for-22-member-institutions-during-covid-19-lockdown/) 2) KENET offered discounted data bundles to university students to access online education resources. (https://somaliaren.org/2020/04/28/somaliaren-early-response-to-covid-19-impact-on-the-somal-universities-a-beacon-of-hope-amidst-an-ocean-of-panic-and-confusion/) 3) SomaliAREN has offered its customised video conferencing platform to member universities for remote teaching and learning. (https://africonnect3.net/marwan-boosts-online-learning/) 4) RENJ has deployed metro eduroam in over 400 hotspots countrywide providing off-campus Wi-Fi connection (https://renu.ac.ug/articles/metro-eduroam.htm) 6) MARWAN hosted the online learning platform launched by Morocco's Ministry of Education ensuring a smooth transition to online education during COVID-19. (https://africonnect3.net/marwan-boosts-online-learning/) 7) CCK has set up a Jitsi-based videoconferencing tool for online classes in Tunisian universities. (https://africonnect3.net/ctn-center/ctn-voice-supporting-remote-delivery-education-during-covid-19-pandemic/) 9) SLREN helped higher education institutes to leverage existing commercial internet access to online e-resources websites and provide zero rating of universities URLs. (https://africonnect3.net/sem-icpe-en-gres-life-support-in-various/) 10) TENET has made significant strides in connecting TVET colleges in South Africa to high speed internet services. (https://www.tenet.ac.za/news/connecting-tvet-colleges-2022/); (https://www.tenet.ac.za/news/ending-bandwidth-poverty-at-tvet-colleges/); (https://www.tenet.ac.za/news/broadband-connectivity-at-50-tvet-colleges-nationwide/) TENET also negotiated free access to online teaching for all university students and cheaper rates for Zoom during the COVID-19 pandemic, making access to online education more affordable. (https://www.inthefieldstories.net/data-relief-for-south-african-students/) 12) The NREN in South Sudan is currently being established and is working hard in hand with UNESCO to make short courses for students a priority to develop their employability skills. 	No		
4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Yes	NREN initiatives facilitate the education and training of youth and adults in relevant skills, which translate into better employment opportunities for them.	<ol style="list-style-type: none"> 1) Eko-Konnect student internship initiative. The Campus Technology Internship Program (CTIP), aims to bridge the gap between today's advanced computing and networking technologies in Nigeria's higher education community. (https://www.inthefieldstories.net/student-interns-develop-campus-security-systems-in-nigeria/) Eko-Konnect also runs ICT workshops and hackathon for young girls. (https://www.eko-konnect.org/ng/ict4girls-virtual-hackathon/) 2) The Networks School (ESR), a training unit of the Brazilian NREN RNP, trained Mozambican students in various areas (telehealth, cybersecurity, etc.). (https://www.inthefieldstories.net/cooperation-with-mozambique-from-telehealth-to-cybersecurity/) 3) WACREN provided courses and workshops to over 2000 young women giving them a jump-start for their career. (https://www.inthefieldstories.net/empowering-women-in-western-africa/) 4) SomaliAREN formed a community called Somali Network Operators' Group (SomNOG https://somnog.org/) which organizes capacity-building workshops and tutorials aiming to develop the skills of the ICT professionals and university graduates. This contributes to the employability of the local university graduates and improve the service delivery of the service providers and operators. 	Yes	By providing internet connectivity to higher education establishments on and off campus, NRENs indirectly increase accessibility to education opportunities to both genders and to the vulnerable as well.	
4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	Yes	NRENs facilitate women empowerment initiatives with the aim of inspiring young girls to pursue a career in STEM subjects	<ol style="list-style-type: none"> 1) WACREN provided courses and workshops to over 2000 young women giving them a jump-start for their career. (https://www.inthefieldstories.net/empowering-women-in-western-africa/) 2) Eko-Konnect student internship initiative. The Campus Technology Internship Program (CTIP) to bridge the gap between today's advanced computing and networking technologies and knowledge shared in Nigeria's higher education community. (https://www.inthefieldstories.net/student-interns-develop-campus-security-systems-in-nigeria/) Eko-Konnect also runs ICT workshops and hackathon for young girls. (https://www.eko-konnect.org/ng/ict4girls-virtual-hackathon/) 	Yes	By providing internet connectivity to universities and research institutes, NRENs indirectly increase accessibility to education opportunities to both genders and to the vulnerable as well.	
4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	Yes	Higher education institutions can procure affordable internet connectivity from NRENs, thereby increasing accessibility to education for their students. This increased access aids in increasing literacy and numeracy levels. NRENs also proved vital in enabling a smooth transition to online learning during the COVID19 pandemic.	<ol style="list-style-type: none"> 1) Through Moodle, ZAMREN ensured learning continued across its member institutions during COVID19. (https://www.inthefieldstories.net/advancing-online-learning-technologies-in-zambia/) 2) KENET liaised with ISPs to provide affordable internet bundles to university students during the pandemic. (https://www.inthefieldstories.net/ensuring-students-and-faculty-have-access-to-online-resources/) 3) GARNET's wireless connectivity infrastructure improves the quality of education and the access to digital learning material. (https://www.inthefieldstories.net/connecting-40-000-university-students/) 4) TENET negotiated free access to online teaching for all university students and cheaper rates for Zoom during the COVID19 pandemic, making access to online education more affordable for students. (https://www.inthefieldstories.net/data-relief-for-south-african-students/) 5) CCK collaborated with the Ministry of Education to provide scholarship students with a data bundle to access blended education platforms (Teams, Zoom, etc.). 	No		
4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	No			Yes	NRENs providing connectivity to higher education institutions working on sustainable development initiatives	Tala-Taveta University, which is connected through KENET in Kenya, hosts the TATAGIS project (in collaboration with Finland) aiming at boosting the use and application of geoinformation in forestry, agriculture, water resources, etc. eventually aiding sustainable development. (https://www.oph.fi/en/projects/tatagis/)
4.8	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	No			No		
4.9	By 2030, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries	No			No		
4.c	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States	No			Yes	Internet connectivity provided in universities and other higher education institutions playing an important role in training teachers and trainers	<ol style="list-style-type: none"> 1) UbuntuAlliance's programme "Train the Trainer" aimed to create training teams, establishing training curricula and facilitating international cooperation. (https://www.nsrc.org/workshops/2016/nsrc-ubuntu-trainer-description.html) 2) The TATAGIS project aims at becoming a hub for training GIS (Geographic Information System) for the region by training scientists and GIS experts to cooperate with various research and development partners in Africa. (https://www.oph.fi/en/projects/tatagis/)



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
5.1	End all forms of discrimination against all women and girls everywhere	Yes	Several NREs and their member institutions provide equal opportunities to their students and personnel beyond the field of ICT. Through dedicated and focused training and mentorship programs, they have been addressing the existing gender inequalities and worked to improve the opportunities available to women.	1) The University of Rwanda has been running mentorship programs and training for young girls. Part of the University, the Center for Gender Studies works in support of the government's gender equality objectives. (https://gs.ur.ac.rw/) 2) Some NREs and member institutions, such as SANREN in South African and the University of Uganda, have been running gender equality awareness training. 3) In Tunisia, UNESCO has been estimated that gender equality has already been achieved well before 2030. The country counts 80% of female representation in areas of excellence and it is the first country in Africa with 55% of women researchers. (https://uis.unesco.org/sites/default/files/documents/55-women-in-science-2019-en.pdf) With two women at its helm, the Tunisian NREN is equally leading the change and offers services to the country's HEIs with 66% of the students being women.	No		
5.2	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	No			No		
5.3	Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	No			No		
5.4	Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	No			No		
5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	Yes	By adopting policies and joining initiatives that promote gender equality in the public sector, organisations ensure that scholarships are assigned equally to women and men, female students receive child support if needed, and that student mentorship is available equally to both genders.	In 2022, Makerere University in Uganda has become the first public sector institution in the country to enroll in the United Nations Development Programme's Gender Equality Seal Initiative, designed to promote accountability for gender equality and women's empowerment in public sector institutions. (https://www.undp.org/uganda/news/makerere-university-joins-undps-gender-equality-seal-public-institutions#:~:text=Makerere%20University%20has%20become%20the,empowerment%20in%20public%20sector%20institutions.)	Yes	By employing more women and giving them equal job opportunities, some NREs indirectly improve these women's participation to society and empower them economically.	Some African NREs, such as GARNET in Ghana and RBER in Benin, have employed women in entry-level and leadership positions within the organisations. This has/will clearly empower them economically and improve their status in society. RENU in Uganda operates at an almost equally balanced gender ratio.
5.6	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	No			No		
5.a	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	No			No		
5.b	Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	Yes	NREs and RREs have been carrying out women empowerment initiatives.	1) Eko-Konnect runs ICT workshops and hackathon for young girls. (https://www.eko-konnect.org/ng/ict4girls-virtual-hackathon/) 2) WACREN provided courses and workshops in ICT to over 2000 young women giving them a jump-start for their career. (https://www.inthefieldstones.net/empowering-women-in-western-afica/) 3) The Harare Institute of Technology (HIT) in Zimbabwe has been hosting the Women in Technology event on International Women's Day. (https://www.facebook.com/harareinstituteoftechnology/posts/women-in-technology-event-the-harare-institute-of-technology-is-hosting-the-women/971535079668591/). HIT has also been collaborating with Wikipedia to improve the visibility of women under the Wiki Loves Women initiative. (https://meta.wikimedia.org/wiki/Wiki_Loves_Women/en)	No		
5.c	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	No			No		

6 CLEAN WATER AND SANITATION



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	No			No		
6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	No			No		
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	No			No		
6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	No			No		
6.5	By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	No			Yes	NRENs support connectivity needs of ned users working at research institutions and university programmes on the topic of water management.	1) NRENs support connectivity needs for The Digital Earth Africa platform addressing some of Africa's greatest sustainability challenges like water management. (https://www.inthefieldstories.net/the-power-of-earth-observation/) 2) Taïta-Taveta University, which is connected through KENET in Kenya, hosts the TAITAGIS project (in collaboration with Finland) aiming at boosting the use and application of geoinformation in forestry, agriculture, water resources, etc. eventually aiding sustainable development. (https://www.oph.fi/en/projects/taitagis)
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	No			No		
6.a	By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	No			No		
6.b	Support and strengthen the participation of local communities in improving water and sanitation management	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	No			No		
7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	No			No		
7.3	By 2030, double the global rate of improvement in energy efficiency	No			No		
7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	No			No		
7.b	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	No			No		

Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	No			No		
8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	No			No		
8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	No			Yes	The work that is done by NRENs helps shape public policies that play a role in economic development.	TENET has made important regulatory submissions on behalf of the South African university community to address aspects of zero-rating at policy level. (https://www.tenet.ac.za/news/behind-the-scenes-work-helps-shape-public-policy)
8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	No			No		
8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Yes	By offering ICT courses and workshops to women as well as training to students, NRENs help them gain essential skills for the job market.	<ol style="list-style-type: none"> 1) Eko-Konnect runs ICT workshops and hackathon for young girls (https://www.eko-konnect.org/ng/ict4girls-virtual-hackathon/) 2) WACREN provided courses and workshops in ICT to over 2000 young women giving them a jump-start for their career (https://www.inthefieldstories.net/empowering-women-in-western-africa/) 3) NRENs employ young staff, for an example see RENU's graduate traineeship. 4) The UbuntuNet Alliance offers online training during the COVID19 pandemic to clearing instructors and NREN engineers (https://africconnect3.net/ubuntu-net-alliance-holds-webinar/); (https://africconnect3.net/ubuntu-net-alliance-and-internet-society/) 5) MoReNet in Mozambique is running an ICT talent competition program, through online courses, for final-year university students of ICT courses. The best students at the National Phase, in addition to receiving an internationally recognized professional certificate, are entitled to a paid professional internship in the main telecom companies, which guarantees them their first job. (https://morenet.ac.mz/morenet-and-huawei-send-young-mozambicans-to-ict-competition-in-south-africa/) 6) The AfricaConnect project phases, with the support of the European Commission, have been supporting the delivery of training courses via the project's partners. The ultimate objective is to build adequate human resource capacities and expertise within NRENs, which will in turn lead to better employment opportunities. (https://africconnect3.net/objectives/) 	No		
8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training	Yes	Through increased access to educational facilities, students are able to learn skills that improve their employability. Additionally, adoption of services that are provided by NRENs by institutions creates jobs in some instances.	See examples above. Every NREN serves as an example for this target.	No		
8.7	Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	No			No		
8.8	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	No			No		
8.9	By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	No			No		
8.10	Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	No			No		
8.a	Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries	No			No		
8.b	By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization	No			No		

Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Yes	NRENs are communication networks with reliable and resilient infrastructure aimed at enabling better and inclusive access to digital technologies and internet connectivity for all. Their work and services aid digital inclusion, economic development and the end users' well being.	1) Every NREN serves as an example here - their free or more economic services (with respect to ISPs) foster innovation, are an asset for economic growth and help narrow down the digital gap in the African continent. 2) The AfricaConnect project phases, with the support of the European Commission, have been fostering digital transformation for the research and education community across the African continent by supporting a reliable, resilient and accessible regional infrastructure which facilitates the access to tertiary education and research institutions. (https://africanconnect3.net/objectives/) 2) The LIBSENSE initiative makes use of African NRENs' e-infrastructure to develop a shared hosting services for repositories, strengthening open access and open science across the continent. (https://libsense.ren.africa/en/)	No		
9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	No			No		
9.3	Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	No			No		
9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	No			No		
9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Yes	Through providing more affordable internet connectivity, NRENs enhance scientific research possibilities and upgrade the technological capacities of their member institutions.	There are several examples of specific scientific research and experiments that NRENs have contributed to through their connectivity and technology services: the Egyptian National Authority for Remote Sensing and Space Sciences (NARSS), the undersea ANTARES neutrino telescope, ATLAS experiment, The Square Kilometre Array (SKA), and Utafi Africa. NRENs are raise accessibility to scientific information and enhance visibility of scholar output by giving more online platforms with affordable connectivity to the scientific community.	No		
9.a	Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	Yes	NRENs themselves are sustainable and resilient - and constantly developing - telecommunications infrastructure, which benefit of regional and international financial, technological and technical collaborations.	One of the most recent example of NREN establishment is Mauritania. The creation of an NREN or an infrastructure upgrade benefits the wider African R&E community as it enables facilitated knowledge sharing and internet access. (https://www.inthefieldstories.net/m Mauritania-joins-the-academic-network-community/)	No		
9.b	Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities	Yes	NRENs work in support of the research and education community by fostering technology development, scientific research and innovation, including in developing countries and landlock states. Their independence is a valuable asset when advising on the development of inclusive policies on education, research and IT.		No		
9.c	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2030	Yes	NRENs work to increase access to digital infrastructures and technologies for African R&E institutions. They enhance access to their members by establishing secure and affordable networks infrastructures and providing inclusive and affordable access to internet connectivity.	The examples are numerous as every NREN offers more affordable, and at times free, internet connectivity and dedicates ICT services to their members, including least developed countries, landlock states and remote locations. A few are: 1) SANREN connected rural higher education research and teaching sites in South Africa. (https://www.inthefieldstories.net/connecting-rural-campus-addresses-challenges-faced-by-researchers/) 2) TENET connected Cape Town's periphery with eduroam in public libraries. (https://www.inthefieldstories.net/connecting-cape-towns-periphery-with-eduroam-in-public-libraries/) 3) KENET has collaborated with the country's mobile service providers to provide data bundles at discounted prices to KENET institutions' students and faculty members (https://www.inthefieldstories.net/ensuring-students-and-faculty-have-access-to-online-resources/). KENET has also collaborated with Microsoft Corporation and Intel for the KENET Student Laptop Purchase Program (SLPP) providing university students and staff to purchase laptops at discounted prices. (https://app.kenet.or.ke/node/2) 4) RENU metro eduroam initiative for off-campus free wifi roaming & zero-rated mobile access for students (https://www.inthefieldstories.net/data-relief-for-south-african-students/) 5) LIBSENSE supports open science and open access in Africa. (https://libsense.ren.africa/en/) 6) CCK is implementing the Campus Network project in collaboration with the Tunisian Ministry of ICT. It offers total coverage university campuses with secure WiFi. This, in turn, facilitates the creation of business incubators that provide an environment to test and experiment with new technologies.	No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
10.1	By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	No			No		
10.2	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	No			Yes	By empowering young girls and women with ICT focused course and workshops, NRENs indirectly promote their social and economic inclusion within society.	
10.3	Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	No			Yes	As above, by providing more training and employment opportunities to women, NRENs foster more inclusive work environments. This reduces inequality of outcomes by increasing women's employability opportunities.	Eko-Konnect's ICT for Girls Programme and the WACREN's Women in WACREN have over the years served as quasi advocacy tools to make cases for the inclusion and employment of women in ICT fields. This is a gradual step in influencing the policy direction of organisations, governments and associations in the favor of women.
10.4	Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	No			No		
10.5	Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations	No			No		
10.6	Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions	No			No		
10.7	Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies	No			No		
10.a	Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements	No			No		
10.b	Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes	No			No		
10.c	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent	No			No		



11 SUSTAINABLE CITIES AND COMMUNITIES

Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	No			No		
11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	No			No		
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	No			No		
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	No			No		
11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	No			No		
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	No			No		
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	No			No		
11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	No			No		
11.b	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	No			No		
11.c	Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	No			No		

Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
12.1	Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	No			No		
12.2	By 2030, achieve the sustainable management and efficient use of natural resources	No			Yes	Through providing increased and better internet connection to research institutes, NRENS contribute indirectly to supporting research in the field of sustainability of environmental resources.	1) The IRF-SIC laboratory of the Ibn Zohr University connected through the Moroccan NREN MARWAN created thematic maps of the Agadir region using remote sensing and GIS technology to help land-management authorities take action to protect the area. (https://www.inthefieldstories.net/mapping-the-landscape-managing-the-future/) 2) NRENS support connectivity needs for The Digital Earth Africa platform, collecting information about ground cover, crop health and coastal environments, and this helps support sustainable farming practices (https://www.inthefieldstories.net/using-satellite-imagery-to-solve-real-world-problems/)
12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	No			No		
12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	No			No		
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	No			No		
12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	No			No		
12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities	No			No		
12.8	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	No			No		
12.a	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	No			No		
12.b	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	No			No		
12.c	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities	No			No		

Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	No			Yes	NRENs provide connectivity services to research centres and institutions working on combatting climate-related hazards.	<p>1) NRENs support connectivity needs for The Digital Earth Africa platform addressing some of Africa's greatest sustainability challenges like climate change. (https://africonnect3.net/the-power-of-earth-observation-interview-with-adam-lewis/)</p> <p>2) The National Authority for Remote Sensing and Space Sciences (NARSS) which is connected to Egypt's scientific NREN (ENSTINET) researchers how to predict dust and sandstorms. (https://www.inthefieldstories.net/monitoring/monitoring-dust-storms-to-give-asthma-sufferers-a-breather/)</p> <p>3) Taika-Taveta University, connected through KENET in Kenya, hosts the TAITAGIS project aiming at at boosting access to geoinformatics education and training to be better equipped to collect and analyse environmental and climatic data to aid at preparations for natural disasters and environmental protection. (https://www.inthefieldstories.net/kenya-finland-partnership-boosts-access-to-geoinformatics-education-and-training-to-aid-sustainable-development/)</p>
13.2	Integrate climate change measures into national policies, strategies and planning	No			No		
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	No			Yes	NRENs provide connectivity to higher education institutions and initiatives aimed at expanding climate-related teaching expertise and capacity.	Taika-Taveta University, connected through KENET in Kenya, hosts the TAITAGIS project aiming at at boosting access to geoinformatics education and training to be better equipped to collect and analyse environmental and climatic data to aid at adaptation to climate change. (https://www.inthefieldstories.net/kenya-finland-partnership-boosts-access-to-geoinformatics-education-and-training-to-aid-sustainable-development/)
13.a	Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	No			No		
13.b	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	Yes	Several NRENs and their member institutions have been consciously adopting greener solutions for their own working environment and services.	CCK is establishing a Data Center fully compliant to energy saving standard. The Center is also working to obtain the Green Data Center label and is currently working with GIZ for the installation of photovoltaic panels to generate electricity.	No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	No			No		
14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	No			No		
14.3	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	No			No		
14.4	By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	No			No		
14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	No			No		
14.6	By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation	No			No		
14.7	By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism	No			Yes		
14.a	Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries	No			Yes	NRENs provide advanced research infrastructure and services to institutions and research centres developing marine technology.	<p>1) The Norwegian College of Fishery Science held live lectures for the student of the City University of Mogadishu on how to make use of marine resources. The lessons use the connectivt provided by the regional REN. (https://www.inthefieldstories.net/bridging-7000-km-to-teach-fisheries-management/).</p> <p>2) MARWAN connects researchers at several sites across Morocco who collaborate with European colleagues on the undersea ANTARES neutrino telescope, which helps better understand the effect of climate change on the oceans and global change studies and its consequence on marine circulation and biodiversity. (https://www.inthefieldstories.net/morocco-boosts-scientific-connectivity/)</p> <p>3) CCK in Tunisia is soon going to deploy a project that will facilitate research on marine life through HPC.</p>
14.b	Provide access for small-scale artisanal fishers to marine resources and markets	No			No		
14.c	Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	No			No		
15.2	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	No			No		
15.3	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	No			Yes	The internet connectivity provided by NREN is key to enhance applications in geosciences and environmental sciences. Soil mapping is one of these data-intensive activities which require reliable and high-speed bandwidth and seamless access to global data.	The University of Zambia has been benefitting from ZAMREN's high speed bandwidth to create digital soil mapping to monitor soil degradation and provide inputs to sustainable land management. (https://www.inthefieldstories.net/helping-to-map-soil-resources-in-zambia/)
15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	No			No		
15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	No			No		
15.6	Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed	No			No		
15.7	Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	No			No		
15.8	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	No			No		
15.9	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	No			No		
15.a	Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	No			No		
15.b	Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation	No			No		
15.c	Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
16.1	Significantly reduce all forms of violence and related death rates everywhere	No			No		
16.2	End abuse, exploitation, trafficking and all forms of violence against and torture of children	No			No		
16.3	Promote the rule of law at the national and international levels and ensure equal access to justice for all	No			No		
16.4	By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime	No			No		
16.5	Substantially reduce corruption and bribery in all their forms	No			No		
16.6	Develop effective, accountable and transparent institutions at all levels	No			No		
16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels	No			No		
16.8	Broaden and strengthen the participation of developing countries in the institutions of global governance	No			No		
16.9	By 2030, provide legal identity for all, including birth registration	No			No		
16.10	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	No			No		
16.a	Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	No			No		
16.b	Promote and enforce non-discriminatory laws and policies for sustainable development	No			No		



Target	Description	Direct Contribution	Argument	Examples, if yes	Indirect Contribution	Argument	Examples, if yes
17.1	Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection	No			No		
17.2	Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries	No			No		
17.3	Mobilize additional financial resources for developing countries from multiple sources	No			No		
17.4	Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress	No			No		
17.5	Adopt and implement investment promotion regimes for least developed countries	No			No		
17.6	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	Yes	NRENs promote cross-continental collaboration and multi-stakeholder partnerships for a more inclusive access to science, technology and innovation.	There are several examples for NRENs' global collaboration initiatives: 2021 MoU between Africa and Latin America to ramp up open science activities (https://africconnect3.net/la-referencia-redclara-and-asren-expand-libense-collaboration-with-the-provision-of-services-agreement/); 2021 MoU between WACREN and RCFRUM about sharing and open access publishing of agricultural research data (https://africconnect3.net/wacren-forum-agree-to-increase-accessibility-to-open-education-resources/); ASREN signed MoUs with ORCID, ARIU and ISOC, partnership between Portugal, Brazil and Mozambique from telehealth to cybersecurity, Collaborating across borders to train engineers in Africa (https://www.infocastories.net/cooperation-with-mozambique-from-telehealth-to-cybersecurity/); LIBSENSE's international collaboration to build communities of practice and strengthen open science and research activities in Africa (https://libsense.ren.africavenue/).	No		
17.7	Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed	No			No		
17.8	Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology	Yes	NRENs contribute directly to increasing the number of students, researchers and educators connected to the internet. They improve access to digital infrastructures and technology and have operationalised numerous multi-stakeholder capacity building mechanisms to ensure knowledge sharing.	By providing more affordable internet to HIEs across Africa, all NRENs are example of direct contributors to this target. Providing free on and off campus wifi roaming (eduroam and metro eduroam) as well as ensuring a smooth transition to online learning during the COVID19 pandemic through elearning services and applications, are examples of how NRENs enhance the use of enabling technology. They have also set up several initiatives for regional and global capacity building, such as: LIBSENSE, Emerging NREN Programme and the Africa Training Initiative, training workshops in the areas of TAI, cybersecurity, cloud and network engineering. All capacity building programmes are aimed to develop skilled staff who are equipped to support the NRENs and their members' networks.	No		
17.9	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals through North-South, South-South and triangular cooperation	Yes	NRENs actively seek international collaboration opportunities and exchanges so as to promote a global transfer of technical and operational skills and expertise.	Through the abovementioned capacity building programmes as well as through students and teachers exchange programmes, NRENs and their member institutions ensure the effectiveness and sustainability of their infrastructures and services so as to continue to contribute to the SDGs. An example is the Sustainable Development Solutions Network (SDSN Uganda Network) launched at Makerere University in 2021. The aim of the network is to implement capacity building mechanisms to achieve SDGs through the mobilisation of universities, research centres, civil societies, private and public sector. (https://sdn-uganda.org/articles/news/sdn-uganda-launch/)			
17.10	Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda	No			No		
17.11	Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020	No			No		
17.12	Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access	No			No		
17.13	Enhance global macroeconomic stability, including through policy coordination and policy coherence	No			No		
17.14	Enhance policy coherence for sustainable development	No			No		
17.15	Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	No			No		
17.16	Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	Yes	NRENs actively seek cross-continental collaboration and multi-stakeholder partnerships to promote knowledge sharing. Thanks to these partnerships, NRENs contribute to SDGs through different activities and in different fields.	See examples above (17.6).	No		
17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Yes	NRENs collaborate with both the public and private sector.	Examples of collaboration agreements and MoU signed with other global networks (RedClara, Association of Arab Universities, NSRC) as well as with private/non-profit organisations (La Referencia, ORCID and ISOC).	No		
17.18	By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	No			No		
17.19	By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries	No			No		