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WSIS FORUM 2022
FROM THE LAB TO THE REAL WORLD: ARTIFICIAL INTELLIGENCE AND THE DECADE ACTION

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>> Honorable Ministers, distinguished panelist, ladies and gentlemen, it is my pleasure to welcome you to this dialogue, From the lab to the real world: Artificial Intelligence and the decade action. Join me in inviting Deputy Secretary-General of ITU Mr. Malcolm Johnson for the opening remarks.

>> MALCOLM JOHNSON: Thank you very much. Good morning, good afternoon, good evening to those joining remotely because as you know, we have a hybrid WSIS Forum this year which I think is a very nice model so that we have those that can come to Geneva that can meet together and discuss over coffee or a tea, but also it allows those that can't come to Geneva to also participate. It is one of the lessons that we have learned from having to go fully virtual in the last couple of years because of the COVID pandemic. It is one of the benefits that's come out of that pandemic.

Other benefits I believe have come out as well in that it is much greater appreciation of importance of technology and it has become more important that everybody has connection, everybody is online, especially during the lockdown and we're

continuing to work in ITU, we were working from home, everybody, for quite a long time and also we had to stop using paper, we are supposed to be a no paper organization for many years and it is difficult to move off paper for many people and, of course, we had to do that. There were many benefits and, of course, a lot of the platforms that we were all using in the Zoom, the Teams improved over that period and we all got used to it and we had very many efficient meetings virtually and, of course, when it comes to discussing some critical issues, it is nice to get together and have face-to-face meetings. This combination that we have got now, it is a very nice model which will continue.

As we know, we are becoming more and more reliant on the technology to meet the U.N. Sustainable Development Goals and we only -- 2030, it is just eight years away so we need to boost the use of technology and we need to get the 2.9 billion people that are still offline online and we have to make sure that everyone, everybody can benefit from this technology especially the new innovative technologies coming along like AI, 5G and quantum computing, Internet of Things, all of these things have tremendous potential. They are only going to help achieve the sustainable goals if everyone everywhere can benefit from the technology.

AI in particular has got a tremendous potential, of course and that's the subject of the discussion here. I believe we have to look at the benefits to be had because, of course, there are downsides to the technology that also have to be addressed. The beauty why have the WSIS Forum, it is that we don't have to confine ourselves to our own specific remits, in ITU we have a narrow remit, basically you're looking at the technical issues and in the WSIS Forum we can discuss all sorts of issues related to the subject without any criticism that we're going beyond our agreement because I think this is the WSIS Forum that's open to everyone. We have the governments, we have the regulator, we have the industry, we have Civil Society, academia, we have many other U.N. organizations.

I think we don't have to worry about stepping on anybody's toes, we can talk about anything here and have a chance for a real good dialogue, cover every issue and hopefully it will help to take forward our aim of bringing this technology, the benefits of the technology to everyone everywhere.

Thank you very much for leading us through this discussion.

Back to you.

>> Many thanks, Mr. Johnson.

So we see that AI is indeed taking hold everywhere from business to daily life, to my personal assistant Siri, autonomous driving, the robotic information, optimizing

healthcare to making art and music. So AI For Good was built on the premise that we have less than ten years to achieve the United Nations Sustainable Development Goals and the AI holds promise from Climate Change to clean energy to affordable healthcare. The potential is there.

How exactly can AI help to advance the U.N. SDGs? A recent study shows that AI can directly impact and enable the accomplishment of 134 targets across all of the 17 goals. For example, AI can map poverty from space, predict natural disasters, detect diabetes and skin cancer using smartphone and many more.

Every day we seek complex new promising use cases emerging through AI For Good and we must be vigilant as it may also inhibit 59 targets such as job loss, energy consumption, bias, decision making, privacy laws, et cetera and many more.

What is AI For Good? Simply put, the goal of AI For Good is to identify practical applications of AI to advance the U.N. Sustainable Development Goals and scale those solutions for global impact and how do we do this? Well, first of all, we can do it -- we can't do it alone. That's why many international stakeholder, including government, academia, U.N. system, private sector work together and support AI For Good since 2017 and today we are going to learn how our partners and key decision makers envision the role of AI and what needs to happen to use the technology to solve bigger problems. We are honored to have with us today His Excellency, Honorable Minister of state for communications of India, Devusinh Chauhan, His Excellency, Phillemon Mapulane, Deputy Minister of communications and digital technologies, Ministry of Communications and digital technologies of South Africa, Dr. Soumya Swaminathan, chief scientist of WHO who joined us remotely, Dr. Stefan Germann, CEO of foundation Botnar and Jean-Yves Art, senior Director of Microsoft. We also will have his excellence where Ursula Owusu-Ekuful, Minister for communications and digitalization of Ghana, she will join us later because currently she's in transit and experienced some technical issues.

I would start with Your Excellency. India has been recognized as a tech powerhouse. Could you please elaborate on some of the AI policy initiatives that have been taken by the Government of India?

>> DEVUSINH CHAUHAN: Thank you. Excellencies, distinguished fellow panelists, imminent participants, ladies and gentlemen, at the outset, let me extend a warm greetings to you, all on behalf of people of the Republic of India and also exchange my sincere gratitude to ITU and WSIS for giving me an opportunity to be part of this high-level dialogue from

the lab to the real world, artificial intelligence and the Decade of Action India, being one of the fastest growing economies has a significant stake in the AI evolution, given its ability to transform economies. India's strategy for AI has created a way forward to harness the power of AI in various ways, as in healthcare, agricultures, education, Smart Cities and in fact in smart mobility and transportation. It also focuses on how India leverages the technology to work with the philosophy of the government. From the policy perspective also, India has formed different groups, the Department of Telecommunication has formed the AI standardization Committee for development of an Indian SDG and the Minister of skies and technology and a policy group was created to work out the policy framework, the Ministry of commerce, the industry has a taskforce on AI to explore the possibilities for leveraging AI for development across various fields in manufacturing and services.

That is also an official programme known as AI gamechangers. That's focused on driving artificial intelligence models in India as necessary for new start-ups in India.

The government has developed the open government data platform India. The single point of access for the public to access datasets, documents, services, tools and applications connected by the ministries.

We also believe that language capabilities are crucial for building AI for mass use, hence we have launched AI-based language and that is the datasets for all languages spoken and across India in such dynamic industry, the regulatory policy is made possible and certain developments are now almost universal with the transition from action to regulation and the promotion of AI to a socioeconomic development.

Thank you.

>> Thank you, Your Excellency.

As a follow-up question, what is the role India envisions for itself and AI in the next decade or so?

>> DEVUSINH CHAUHAN: According to a report published India is among the top ten countries in the world in terms of technological values and funding in artificial intelligence and will expand AI in 2021, it was mentioned that India is the largest commercial and business adopter of AI in emerging technologies. Further, India is among the top three largest start-up hubs of the world. In the programme an AI sales catalyst, this is creating solutions and contributing to the building of new India governed by technology AI use has been in a number of sector, India's healthcare provides artificial intelligence, there are more than years in this today, the AI

systems for computing, for quality, AI when it comes to predicting diagnosis and other trainings, some examples have included in banking, AI power, chat bots using in all leading banks, in automobiles and also the connected technology advanced machine learning and Internet of Things at various stages of deployment to enhance driving.

Even large enterprises are also doing a lot of research, you have the leading software technology funds, hardware technology and equipment and Telecom and all of these -- the ICT and application, the developing centres in India, the scope and the range across the massive tech, it is the depth of the AI market in India, across various special agency, including intelligent cloud, computing, Internet of Things, policy networks to name a few.

Most of this falls under the operating and the specializing AI centres in India and the service of the global AI and the data science, the initiatives and the capabilities of the funds, I'm confident that the AI revolution will continue to grow and we'll be the AI hub for the world.

In the next decade, a as we endeavor to incorporate ICT and AI in all of the sectors of the economy and I look forward to the active participation and the contribution to the AI study groups, the trends in the sectors.

Thank you.

>> Many thanks, Your Excellency, for such inspiring insights.

Now I would like to turn to His Excellency, Mr. Phillemon Mapulane. There is a strong partnership with South Africa within AI For Good, we have done two innovation sessions, we have had the keynotes with experts and we also plan to bring AI For Good to South Africa in the fall. In your view, how can AI assist in achieving the U.N. Sustainable Development Goals?

>> PHILLEMON MAPULANE: Thank you very much, facilitator, programme Director, the Deputy Secretary-General of ITU, Excellency, ladies and gentlemen, today the world is facing enormous economic social challenges such as the provision of clean health, sustainable energy and education, eradication of poverty and hunger to 7.9 billion people.

Moreover, as with other regime, African economies were greatly hit by the COVID-19 pandemic in 2020 which led to the slowing of the global economy. On top of this, the lockdowns and restrictions accompanying the pandemic led to drops in the manufacturing of goods, loan, investment, tourism, other revenue generating activities across the African continent.

Throughout the history of human kind, the world has continued to experience advancements in technology, however, since the outbreak of the COVID-19 we have seen an expediential

adoption of digital technologies associated with the fourth industrial revolution such as artificial intelligence.

These technologies are presented with both opportunities and challenges to solve the world's socioeconomic challenges and AI has brought tremendous benefits and improvement in the quality of life for all people, particularly around medicine, food production, communication transportation, education, housing and many other advancements. AI systems are deployed to souths and many socioeconomic problem, for instance, to respond to crime situations AI-based systems are developed to detect and identify gender-based violence areas, theft, human trafficking, criminal activities in specific areas, including identifying spots for tourists. In the agricultural sector, which 70% of African population works, AI may be used to detect the types of soil and client deficiency, making it easier for farmers to handle their crops.

It has become a huge relief to the farmers who are constantly dealing with crop deficiency, especially our African continent. The medicine, AI, assisted in many cases, helping doctors diagnose patients more accurately, including making predictions about patients' health. The benefits associated with AI can only be leveraged by all mu manatee and if they have access to robust digital infrastructure and are connected to the Internet without downplaying the opportunities and benefits highlighted AI is also having ethical failings such as privacy bridges and biasness. For instance, datasets and algorithms can reinforce gender, racial, other biases. When the dataset mostly is corrupted by humans, that AI relies on are incomplete or bias, they may lead to bias AI conclusions. Similarly, AI can exacerbate inequalities by automating things and displacing jobs, negatively impacting the interventions to the achievements of the SDGs.

Thank you.

>> Thank you very much.

As a follow-up question, just to focus a bit more on the industry development, does AI have the potential to enable SMEs development in your country and what interventions do you propose to be put in place in this regard.

>> PHILLEMON MAPULANE: Thank you. As I have highlighted earlier, artificial intelligence is centred to the development and growth of the African continents economy, including the growth and development of the SMNEs, however, several barriers need to be eliminated notably accessed to data that seems to be essential in commissioning AI.

Fortunately access to this pertinent resource is still limited and it is therefore a call on governments to put in place policies and regulations that would make big amounts of data

accessible to SMNEs and potentially the innovators and they themselves, they should be encouraged to start investing on measures that enable them to collect data, considering that AI is emerging technology and it becomes critical that government in partnership with the private sector must have programmes to develop them on appropriate scales. The other area to focus on is on the cost to communicate, considering that skills development programmes are associated with AI may require broadband and the correct bandwidth. Change management is with the other areas. It could be exploited to help employees across the organization understand AI and have them enhance productivity that can reduce the amount of time that they spend on minute yal tasks.

Other interventions could include the hosting of AI with local, international experts with the aim to create capacity for local entrepreneurs.

In addition, there is a need to assist the AI start-ups to participate in the international Forums which are platforms for expert delivery contributions for AI in socioeconomic development priorities.

Thank you very much.

>> Many thanks, once again, to His Excellency, Mr. Phillemon Mapulane.

You can see now the slide, we launched in February the AI For Good neural network and the AI powered matchmaking platform featuring all of our content since 017 with keynotes, panels, demo, exhibits and more. If you haven't, we invite you to join the neural network platform and use it to learn network and collaborate.

Some of our partners, they have already use that had to leverage the expert network. So Stefan Germann, I would like to address a first question to you. As an AI For Good continuous partner, what is your role to promote the intergenerational dialogue on AI and what should we do to bring different communities to work together on inclusive AI?

>> STEFAN GERMANN: Thank you very much, Excellency, ladies and gentlemen, and Mr. Johnson, I have a comment, you mentioned about not stepping on each other's toes, I would encourage when we dance together, sometimes we step on each other's toes. I think that brings the intergenerational dimension to it because young people have the power to dance with us and sometimes step on our toes and sometimes it is probably good they step on our toes.

As a partner for five years with the AI For Good that ITU visionaries started a couple of years back, I think we have to realize that AI is rapidly progressing to be a general purpose technology. I think it will be more transformative in the next

30 years than when we entered electricity into this world. I would like to just take a moment for all of us to imagine what the world may have looked like before electricity and after electricity.

We wouldn't be here, we wouldn't have light, no microphones. A total different world and AI is bringing increasingly great opportunities as we have heard from the previous speakers and I would like to disclose the digital optimist, but I have a big part, I think AI and data is bringing as well significant danger if we're not addressing it collectively and that's so good to see that governments are really taking heed on this given the important role of citizens' representation.

If you reflect that data specifically let's say in domains like health, education, it is really about me and you, our clinical data, all of this, so we're made up of data. So when we talk about data ownership, aren't we talking about people's ownership? And with the current business models of some tech firms, that we're actually becoming more than Big Data slaves. So I think this is a very timely matter here and it is great that the ITU and WSIS, that they're really addressing this issue. I think that there are ways out. The U.N. general Assembly in 2019 received the report from the Special Rapporteur on extreme poverty Phillip Austin, the digital welfare state and he said, and I quote, there is a risk that the world is stumbling, into a digital welfare distaupe I can't. I would like to just give one country example where things can go fairly wrong and that's the Netherlands.

In 2020, in February, a court ruled against the government that they had to scrap entirely an AI enabled system that was focusing on welfare fraud because the similar system was very quickly scrapped when it was used for tax fraud.

The system was targeting vulnerable poor populations. So we definitely need to make sure that we include young people and have end-to-end Human Rights impact assessment when governments and private sector in the lab, before it comes to the real world is ensured the Human Rights are respected.

Thank you.

>> Thank you very much.

Maybe just as a follow-up question, and I know that just in two days we are doing a session together on youth and artificial intelligence designing our possible future at the Youth Summit. We invite you to join us on the 3rd of June physically or remotely.

So maybe if you could highlight some of the projects that you're doing in that area. Thank you.

>> STEFAN GERMANN: As a foundation, we have engaged a lot

in really bringing young people and policymakers at national, regional, global level together. We're really pleased that the ITU is having this Youth Summit and as mentioned before, I'm hosting and speaking in one of the events there.

This is just one example. Another important example, it is actually the work that the ITU is doing together with WHO on the Working Group on AI in health, specifically around the benchmarking on algorithms in health and as a foundation we have been able to partner and support the efforts.

Another example that we're working with, where the Indian government is quite involved as well, it is the AI for health research collaborative, the idea is to bring Member States together to pull the best brains and resources and to Chair research for the global public good in the health field and I know the Ambassador that's leading that effort wishes that the Summit, that it is endorsed as a knowledge partner. It is great to see that from the Indian government.

So this is just in a she short nutshell the work we're doing and we're ensuring in all of these aspects like this and others, that young people, they are the digital native, we have 1.2 billion young people, 42% of the world population is under 25 and these are the digital natives. These are the digital experts. Are we as policymakers listening to them? Guide news how we should regulate and policy the future.

Thank you.

>> Thank you very much, Mr. Stefan Germann.

We have seen another great example of collaboration and, of course, the entire U.N. system works on the AI For Good since its creation.

ITU collects all U.N. activities, projects, initiatives in the annual report on AI activities in the U.N. and, of course, one of our claims to fame is that we're action oriented and more than just a talk show. AI For Good has delivered on its action promises by launching a series of organization efforts on AI which takes place in so-called focus groups. Focus groups are open to everyone and no ITU membership is required. One great example of this collaboration, it is, of course, ITU, WHO focus group on AI for health be, Stefan Germann just had mentioned that. So we have with us today remotely a chief scientist of WHO, Soumya Swaminathan, so I would like to ask you some questions. Let's see if she's connected.

Good afternoon, welcome!

>> SOUMYA SWAMINATHAN: Thank you.

>> So we have a couple of questions for you.

AI seems to be developing in an increasingly rapid rate. What do you think we can expect from the next generation of AI, particularly in the health sector and what are some key

opportunities and challenges?

>> SOUMYA SWAMINATHAN: Thank you very much for including me and including WHO in this panel discussion.

Of course, we have a close working relationship with ITU and I pay my respects to all Ministers who have spoken before me.

As you said, the artificial intelligence seems to be developing at a very rapid rate and during the pandemic we have seen that many of the digital technologies actually, they did get advanced in many, many countries and we now have very sophisticated artificial intelligence and machine learning algorithms, the computing is becoming more powerful and it also is becoming more affordable. The digital frontier world has provided unique opportunities to make huge leaps. I'm thinking specific Chi of the healthcare domain.

There are many areas in health where AI For Good could potentially make a big improvement around public health surveillance.

Artificial intelligence, for example, it is being used by emergency programmes to scan the reports from around the world from the media to pick up any events that could be a potential -- of potential significance, that picks up thousands of such potential events and that has to be further streamlined and looked at to see which ones one needs to spend time on investigating. It has been used more and more for drug development and it can be, of course, used for forecasting modeling, monitoring, and also it can be used for training of the health workforce.

Improving the clinical outcomes with thinking about decisions support tools based on artificial intel again and, of course, for this you need to have context specific data in order to make the algorithms useful for a particular region or country.

It can help to optimize operations and healthcare provisions. All of this can ultimately improve individual and public health and help to assist countries it achieving universal health coverage.

We have had a few good example where is AI is already used.

Especially radioaling diagnosis and other, it has been used in India as well, where you have a shortage and you can use AI to look at the screenings and then point out to any ones that may need further appraisal by the specialist, by the radiologist. It has been used to guide immune therapy, using artificial intelligence to read the sequences of cancer cells, it is also being used for example to detect the diabetic retinopathy.

This is some examples where it has been shown to be quite

useful and it is getting into wider use in the clinical area.

We also have to remember that there are big opportunities, but also challenges. The main issues really are around availability of data for research so that these artificial intelligence algorithms can be trained and validated on good representative datasets so currently we have a project on cancer diagnostics with camera and AI-based tool because ultimately we should be in a position for the work that the community has worked together to diagnose cancer and treat it in the same setting. For this you need a database of pictures, of lesions, of the cancer at different stages from women, from different parts of the world, different ages, different ethnic backgrounds, so on. We don't have such a global database. This is one of the things that we're trying to address through the focus group.

The other, of course, it is -- you need high quality data which is also representative. The other is appropriate governance. I think Stefan Germann had talked about data privacy, Human Rights, et cetera, so we need to think through our governance framework which is ethical and which addresses the issues of equity, of transparency, et cetera, so to do that, WHO along with ITU, we worked on and we have released a guidance on the ethics and the governance of artificial intelligence for health and currently we're working on in the next few weeks or months, we will be able to release guidance on developing appropriate regulatory frameworks as well as the guidance on generating evidence for AI-based medical devices and this is going to be very useful for ministries of health and for the national regulatory authorities to develop their own regulatory frameworks within the national system in order to assess and then approve any kind of devices or other clinical applications that are based on AI. There are also legal issues when you use AI for predicting things, diagnostic, for informing patients that they should take treatment A or treatment B, there will be legal issues around who takes the liability for that decision, is it the treating physician or, you know, is it someone else, is it the hospital? They're using that AI-based system? Is it the patient? So there may be some tricky issues that come up which needs to be addressed and are a guidance, actually it lays out all of the issues so that countries can at least start having a debate and a discussion and as Stefan Germann had said, it is important to involve the end user, the Civil Society, the community that's ultimately going to benefit but also to potentially be harmed if some of the technologies are used without their knowledge and without their consent.

I think, you know, to summarize, we have to also recognize that the landscape is rapidly evolving, the AI landscape and

the needs and challenges also keep on changing with advances in technology.

I think that the need is for all of the stakeholders, ministries of health, the device developers, agencies, like ITU, WHO, others, to continue to engage along with the communities and then address any needs, both at the national level and the global level.

Thank you.

Thank you very much, Dr. Soumya Swaminathan. You just mentioned the importance to work with the international organizations. In your mind, what is the role that such organizations can play in mitigating the risks and advancing equitable access to the benefits of AI.

>> SOUMYA SWAMINATHAN: Thank you for that question.

Let me give you a couple of examples. The first one, it is the WHO and its mission to promote health, to keep the world safe and vulnerable, we developed a global strategy on digital health in 2025 which calls on all stakeholders to focus on collaboration on knowledge sharing as well as on implementation, governance, other key areas. So many, many countries are developed, developing national health digital health strategies on blueprints and it is very important to have that kind of a framework rather than allow a siloed development of different digital solutions within a country.

That's the first.

We have a strategy, 194 states signed up, they're working on the implementation.

Again, within that, you have the AI that comes in as providing some opportunities and we have the framework on the ethics and the governance, but in 2018 WHO and ITU came together and established a focus group on artificial intelligence for health. I think this focus group is currently meeting in Berlin.

The group has brought together over 100 partners and engaged with tens of thousands of experts through the various groups within that focus group.

They are trying to depict key priority topics on which they are working and they have developed the first ever benchmarking framework for artificial intelligence. It is a draft benchmarking framework, it covers the guidance on ethics and governance, regulatory frameworks, tech, data specification guidance, best practices, and guidance on scaling and implementing best evidence based AI solutions.

They have looked at use cases, fighting cancer, others, managing snakebites in low and middle income countries to name just a few. They have promising evidence that recently was published on these and all of this has been the work of the focus

group.

The tech group which was part of the focus group has also created an open code initiative which is developing opensource software blocks for artificial intelligence, machine learning, validation, evaluation and they're looking at how to share and cross share datasets for research and validation because as I mentioned, the quality data, it is very important for validation of some of these tools.

This Working Group that was set up in 2018, it is now taking stock of the work that they have done, it is a very productive one and it may be sort of a pilot or it can set an example of how there could be other benchmarking frameworks that U.N. agencies are working on.

Essentially, you know, what we need to do, it is to build on this and create a global initiative on artificial intelligence for health so that all relevant agencies and partners can be brought together and I can not over vest the importance of research and evidence generation in this area. It is sometimes very easy to think that an AI tool can solve all of our particular problems in an area and it is not necessarily true.

There needs to be vigorous evaluation as we vigorously evaluate a new drug, a medicine through doing clinical trials, any new solutions that are being adopted also need the same kind of evaluation and publication of the data so that they can then be put into guidelines because without that we are at risk actually of taking on things which are not really improving people's health outcomes.

You know, instead of looking only at the process indicator, we need to look at the end points as well. A good example, it is, you know, we often talk about the sun, which, of course, it is part of physics, they don't deal with health, but this global collaboration of scientists that share data, that work together collaboratively on finding solutions, we have seen the enormous scientific benefits that a body like sun has created for many partner countries around the world and hopefully a global coming together perhaps through either mechanism could provide a similar model for us to advance the applications of AI for health.

Thank you.

>> Many thanks, Dr. Soumya Swaminathan.

Just to highlight the meeting of the focus group, AI for health is currently held in Berlin and you can also join remotely as we speak.

Of course, AI sector is one of the greatest examples, health sector, one of the greatest examples where AI is used and there is many more and as a tech company Microsoft has

deployed the AI systems for use in many industry, including health, also finance, manufacturing, and besides those applications what is your experience, Jean-Yves Art, addressing now to Jean-Yves Art from Microsoft as a toll to accelerate the progress towards the U.N. Sustainable Development Goals.

>> JEAN-YVES ART: Thank you very much. It is a pleasure to be here with you and to answer the question whether and how AI can help progress the Sustainable Development Goals. We think that AI is a positive force that can be transformative for the world and for people's lives under certain conditions when it is used in a trusted responsible, inclusive way, trusted, responsible, inclusive.

If you think of the challenges that the world is facing today, whether it is poverty, hunger, environmental challenges, discrimination, exclusion, there is work for everyone. The solution is not in the hands of a single organization, the solution is not in the hands of a single sector, but what we think, it is that everybody can contribute and that in contributing to the pursuit of the Sustainable Development Goals technology can be an enabler, technology can be an accelerator, again, under certain conditions that I mentioned earlier.

Here is the reason why at Microsoft and I think other companies are doing the same thing, I'm going to talk about what I know, it is what we do at Microsoft, we have the programme which bears a name that is going to sound familiar to you, AI For Good, not only is the name familiar but the whole idea, the whole structure of the programme, it is very much similar to the one which ITU is driving and which is really to encourage others to try to work together, come up with artificial intelligence, other technology solutions in order to address or at least progress the Sustainable Development Goals.

This programme, AI For Good at Microsoft, it is a big one. It is 165 million-dollars that we are giving and we have been giving already for some time into five different chapters. One is AI for earth, AE for health, AI for humanitarian action, AI for accessibility and these programmes, all the programme, the last one, AI for cultural heritage, all of the programmes have a similar structure. What we do, we provide grants and we can provide also technology to individuals, company, institutions for them to develop technology which are going to progress science and progress access to science in those various themes that I was mentioning.

For instance, the AI for earth programme, it is a 60 million programme which we have put together since 2017 and which is supporting projects on AI and what AI can do in the fields such as climate, biodiversity, protection of water,

sustainable agriculture, smart agriculture and again, the whole goal, it is to provide those funds, provide the technology to organizations and to individuals who are going to develop AI systems that can help in the pursuit and improvement of those various fields.

AI for earth is used, those 50 million, it has been used to support 1,000 projects in 100 countries so far. The project, the five-year project is coming to an end and we're following up on this AI project with the development, one, you may have heard about it, it is called planetary computer, and planetary computer, it is a platform through which we collect data and we provide access to data and opensource tools to the same individuals and organizations using the data, using the tools to help make progress on the challenges that we're facing. That's for the AI for earth project. AI for health, another one, there it is 50 million, a big chunk of money that we're awarding to organizations and to individuals who are going to work in three fields related to health.

The three fields are research, fundamental research on health, the second one, it is sharing information between organizations and on the fight against modality and the fight for longevity and the third one, it is projects which are going to help reducing health inequity. Again, favoring Health Equity, favoring access to medicines that you have generally for underserved population.

These are two chapters of the overall AI For Good programme, as I have mentioned, it is a pretty large amount of money. But the whole idea I think, one which I would like to underscore here, it is that the way that I see it, tell me if I'm wrongish the way I see it, it is a programme that's very, very much aligned on what ITU is trying to do, favoring and encouraging organizations, individuals to work together on how they can develop AI, how they can provide access to AI in order to achieve progress of the Sustainable Development Goals.

>> Indeed, there are definitely synergies between the two programmes and AI sounds like a technology that's full of promise. Doesn't it raise any risks even when it is put to use for the Sustainable Development Goals?

>> JEAN-YVES ART: It does.

In response to the first question, can AI used for good, you would be surprised if I say no. You may be surprised to hear me say that AI is indeed a risk, it raises risks. We have heard, we have heard already some of the risks here, risk of discrimination, I think for instance one example, it is well-known, the risk that datasets are rescued in such a way that there is discrimination in finance, one that's often mentioned. Another one we see, it is of course with autonomous

driving and the fact that, you know, the technology is good, but not perfect and you have the autonomous driving.

I think that in order to try to address the risks, there are two ways, two complementary ways in which we can at least reduce the risks. The first is on the side of the developers of the AI systems and there are a number of principles that we're offering to implement and hope to implement, to serve those principles in the way we develop AI systems and it is principles such as fairness, such as transparency, such as accountability, such as non-discrimination and so a number of principles where we're trying to really implement an ethical way of developing AI systems.

We don't think we should stop there though. We think that there is really a role for regulators to come in and especially when you look not at the development of AI, maybe it is important for regulators also to come there and where regulators have a place also, a role to play, it is in the scenarios in which AIs, the system is developed, and I'll give you one example to show you how the two -- the two aspects which I have just mentioned, ethical principles on one hand and the regulation on the other hand can come together.

It is the case of facial recognition. Facial recognition, while essentially an AI tool and for that to work, you need to, of course, implement the systems in a way that's going to address one main risk, which everybody knows about, which is rescued datasets and that the machine actually does recognize and makes mistakes and we have heard about those mistakes. I won't insist on them. It is where the developers come in, they make sure that they work with datasets which are non-discriminatory, reflecting, in fact, if you want the circumstances in which the system is going to be used.

The way that developers need to think about it, it is to think about the work in which the system will be developed so that the system is developed in a way where there is no discrimination and the system will be fair to everybody.

Then once you have facial recognition system, what kind of scenarios in the facial recognition system will be applied? There are scenarios that are really positive and where we would like to see facial recognition to be applied. It is, for instance, for family reunion, in those countries where there is a natural disaster, in countries where you have refugees that are trying to find families, so that's a case where you want to really encourage the use of facial recognition.

There are other uses and other scenarios where for a company which is very much pushing, encouraging respect for Human Rights, there are systems, there are circumstances where facial recognition is not a system that we would really support

or encourage and it is in those countries where there are regimes using for the facial recognition in order to police the political opponents. For us, this is the case where you should not use facial recognition. That's where, again, for mow to keep on here, it is a combination of things that the companies need to do when developing the system, complying with a number of ethical principles such as fairness, transparency, accountability, and then regulators have to come and to say for instance for you, such as facial recognition, there are certain scenario where is the system is good and other scenarios where we think that the system should not be used.

Thank you.

>> Many thanks for the highlights.

Now we have with us our final panelist and he's joining remotely.

We have with us the Director of international affairs of the Ministry of communications and digitalization as is of Ghana and he will speak for the Minister of communication and digitalization of Ghana., Ms. Ursula Owusu-Ekuful.

Can you hear me loud and clear.

We welcome you you to the high-level dialogue.

Thank you very much. On Minister, I apologize in regards to her for all. Greetings from where tomorrow we start the Youth Summit and it is refreshing that the conversations will continue from WSIS to the Youth Summit and hopefully we will get to the Plenipotentiary where a resolution on AI, which was not achieved the last time. So with Ghana, what happened over the last six years, as we sought to adopt AI was just as mentioned, how do we use regulations and how do we use policy to guide so that it could be adopted in a way that the concerns about ethic, privacy could all be addressed without any hesitations for citizens.

That went along with a kind of reform, institutional reforms as long as many others. Currently in Ghana, there is a data protection Commission who has a mandate to be accountable to the people to comply with legal requirements of personal data and respect and the Rights of individuals.

That being, then there is the agency who oversees the technical infrastructure which stores the digitized information for those who have concerns about data being out of country or in country, there's a possibility of the cloud service.

Then we have -- we had to get a cybersecurity authority who mandates mainly as to ensure that every data as much as possible is protected and is not invaded.

So the outcome of this, coming together, it is the mass digitalization effort that we have had in our country over

various government agencies creating Big Data and increasing the demand for assets which for analaysist and also for decision making.

In this, if we say this, that we're not able to do this alone, it has come along with a lot of collaboration and much more inviting aspects to know better especially what is the technology and the development and the national AI strategy and national ethical use strategy and also the national data market strategy.

We have Smart Africa project who are helping us to develop the regional data governance strategy and this will be for all African countries.

Some of the strategies, they're in the finalization stages, some of them, they currently are working on the AI implemented and so we could go to what the cybersecurity authority for example as we want to do more of a national stakeholder approach where AI would protect the digitalized information and eliminate fraud and also corruption in the systems and bringing all stakeholders to be able to deliberate on how to find new ways of protecting digitized data.

Similar efforts are going with several national agencies who generate this data and the potential of the digitized data and we have similar policies from the national ITU authority for the profiling of the information and as the government has a smart workplace for the government institutions and it has been very useful going forward.

On these fronts, we look forward to a very critical business data as part of the national infrastructure and so we're ensuring by policy that all of the concerns that people have with AI use will be minimized and then we could enhance the use as well.

Thank you.

>> Thank you very much.

Ghana is indeed one of the leading AI countries in Africa region and how would you see the future of AI in Ghana and what can developing countries learn from your approach?

>> Well, what we want to take out is that Ghana recognizes the value of the digitalized efforts and it is not too late and it should not be abstract tore many. We have seen the value of this and inevitably the digitalization of the information, we have applied Big Data to the deep machine learning and the use of artificial intelligence to increase Internet of Things and enhance critical business decisions. And we have established the data market to proactively enable a proper sharing of the national data among public sector institutions.

Just as we have wanted to combine with the national data market we're also bringing together the high volume and high

sensitive data and the use of data to a controlled echo space.

An echo space, there is a proper use of the technology and application of key data protection principles and I heard that's being mentioned and the application of standardized data governance framework, sometimes the governance, they want to stay away, but if you have the framework, we know what space we're all playing within to ensure that the data sharing the eco space, those that need the data to aggregate them to keep awareness, they're doing that currently and the decisions which are being made, especially when human lives are involved, just rights and we can look at this as a maximum amount of accuracy. We want to ensure that data is currently managed tenacious' highest level instead of the traditional fire fight and means of data protection which is usually based on the approach of compliance of what we want to enhance and let people know how to use it and they do it currently from the start.

We are encouraging and we have a number of data controllers who they have talked about the account by supporting the implementation of the standardized programmes across the country and we are training all by policy, we ensure that every institutions in the country, they have a list of fully trained professional data protection with manuals to guide them with knowledge and the country is aligning the delivery of the privacy framework to the national transformation agenda. It is not so it is not in isolation. The data controllers in addition to the trained professionals, they have standardized the creation of key documents within the ecosystem as part of the privacy information management system with the understanding that with this implemented, it helps with the data protection.

What we seek for the future, it is that in the echo space there will be appropriate access to the data and smooth access to business critical data for all.

We believe that AI will help especially the public sector make decisions that will maximize potential digitized information itself, sub like good, minimizing the distress to any citizen.

We support the use of AI for processing data, for the general good of data and communities, we see that the application is already there in Ghana and the health sector, education agriculture, they're currently adopting AI as we have heard from the WHO, the adaptation of the AI is already in health and we are using that.

So as a key player in the market and leading to the development of AI with the provision of clean, quality data because we see that when the data is not clean then there could be errors with the artificial intelligence and key decision

making.

It is something that countries should know about, that clean data, it is also very important and we have to ensure that we don't use what is not the same data or accurate data to feed into a system which could be making dangerous decisions.

Thank you very much.

>> Many thanks again for your great highlights.

We have had great insights about different projects and initiatives in the area of AI For Good across the world. Before we wrap up, my last question would be to you, Mr. Johnson, a similar question that I already asked Dr. Soumya Swaminathan, what role can international organizations play in harnessing the potential of AI to accelerate the progress towards the United Nations Sustainable Development Goals?

>> MALCOLM JOHNSON: Thank you very much.

Thank you, all of the panelists for the tremendous input to this discussion. It is very really interesting.

I think on that question, I think as Dr. Soumya Swaminathan had mentioned, described how WHO is using AI to better provide its own service to its members. I mean, every U.N. agency has a particular remit and most, if not all of them, can use AI to be providing a better service to their membership for whatever a particular remit the organization has.

That's why it is very important that each -- that we each play our role in our own specific competencies.

ITU causes the lead ICT agency, U.N. agency, so it is only right that we should be promoting technology and encouraging its use in all our Member States.

This is why we initiated five years ago I think almost this week is it? Five years ago I think, we initiated the AI For Good because we chose the name AI For Good, there were so many negative aspects, people were talking about AI andon if it has been mentioned by the panelists, but we wanted to emphasize, you know, how it can be used for the common good.

That's been very successful and because it covers such a broad area, it wasn't just an ITU event, ITU is the organizer and we had I think 47 U.N. agencies involved in that AI For Good.

That's a very nice way that we can have this sort of dialogue.

Also, of course, as I said, the U.N. agencies themselves can use it to provide a better service and also to make themselves more efficient but coordination, it is a very important aspect of that and it has been mentioned many times, the importance of coordination and we need to be coordinated within the U.N. system as well because we're all using this technology.

We're trying not to step on each other's toes. I think

it is important that we keep within our own specific remit, ITU has a clear remit, very technical remit and the standardization, spectrum management, helping countries to encourage the adoption of the technology.

That's our remit.

It is very important, of course, that we develop the standards in the years that's within our competence to ensure interoperability and that goes across all -- not just AI but everywhere.

We have to have interoperability to make sure that -- and equipment and services produced by different manufacturers and operators and to operate and where would we be without it.

It is only through international standards that you can achieve that.

Also, you have the international standard, the cost comes down through the economies of scale.

So that's very clearly our remit, but because we're the lead ICT agency, U.N. agency, we also initiated an internal U.N. group on the use of AI to make ourselves more efficient so we have an internal U.N. group which ITU co-Chair was UNESCO, Preeta is the ITU co-Chair and is with us here. Doing a tremendous job, making sure that we do -- that we're coordinated and we use the correct technical standards and that we have a holistic approach to the adoption of AI throughout the U.N. and we have 42 U.N. agencies and other U.N. bodies involved in that group that actually met today as there is really good work there.

I think clearly at the U.N., they have a very important role to play, all of the different bodies in the U.N. and all of the standards bodies as well, ITU is a standards development organization and we need to collaborate with all of the other standards bodies around the world and we do that and also, of course, much more closely now with the Internet community, working very closely also with ICANN, ITF, and of course, many of the members of ITU now are also from the Internet community, not just from the Telecom community.

Collaboration, coordination, cooperation, they're the three most important words and I believe that that's the role that ITU has to play along with all of the other international bodies and glad to see that the Minister from South Africa is having to be in two different places at the same time and luckily they don't have too far to go.

This is the first time I think since probably the first one -- first WSIS Forum, it was in 2009 and I think that was only in ITU because it got bigger and big, we started to use the CICD and then you had so many rooms you could use, we had 11, 12 events going on at the same time. Now that we are only in ITU, it is much more of a family affair and not too many things

going on at the same time. I think it is another lesson to be learned actually.

Quite like things the way they are and I think we -- I think I can spec for all of us, we seem to be having a really good week and I'm sure it will continue that way.

Thank you. Let me take this opportunity to thank all of the panelists, probably you should have been doing this.

Anyway, thank you very much.

>> Thank you very much, Mr. Johnson. Indeed, we are coming to our fifth anniversary for AI For Good next week. So we would call upon the international community to continue working hard for the next five years and so if you have some -- some of you have any final statement, please jump in so that we still have a few minutes.

Any remote panelists? Yes.

Dr. Soumya Swaminathan? Are you with us? Yes. Yes. I'm still with you.

You know, it is a pleasure to listen to the various panelist, in particular the perspectives from the countries (Soumya Swaminathan) and I would just like to say that we need to take on board the gaps and challenges that they have highlighted and shape our work.

When I say our work, I mean, our organizations, WHO, ITU, so on to address.

I think that the meetings will be interesting because we're also launching there the Broadband Commission report which was developed by the Working Group on virtual health and care and this looks at how telemedicine and telehealth really got expanded during the pandemic and they're looked at deep dives in 10 or 12 countries to look at what worked what, did not work, what were the successes, challenges, and what countries need to do in the future to really expand telehealth and telemedicine. Again, with the view to improving health outcomes.

Particularly for countries that are investing in health system, this is a very good time to think about how to incorporate the digital technologies and to better deliver services at the primary healthcare level.

Thank you.

>> Thank you very much.

So we are getting close to the end of our time together. Unfortunately, we didn't have enough time to take all of the questions from the online audience, but please join us, AI For Good, it is all year, always in line and you will have opportunities to ask your questions and to continue the discussion on this important topic tomorrow because we have another session.

I would like to thank again all of our distinguished panelists for your great insights, thank you very much for coming. Of course, our audience, thank you for being so good listeners, and please note that this meeting was recorded and the recording will be made available on the WSIS agenda but also on the AI For Good neural network so you can always watch the recording there and once again, I invite you to visit the AI For Good booth and make sure that you have created your neural network account.

Thank you for coming. I wish you a good rest of the day.