**Transcript 2 – Astronomy and SDGs: Examples from previous OAD projects**

The OAD are the Office of Astronomy for Development, and also runs its own call so this is independent of the IAU 100 call. And the OAD call has been run for every year since 2012. So the aim for this call is slightly different from regular outreach funding proposal. What we want to do is try to use astronomy and when I mean astronomy, I mean the body of knowledge in astronomy but also the people in astronomy whether professional astronomers, amateur astronomers, astronomy enthusiasts as well as the tools and methods of astronomy. So use all these things in various ways to have a positive impact on society. We call (this) development - we call it using astronomy for development.

And in funding development, we use the sustainable development goals, that Samir mentioned. These are the goals adopted by the UN, and adopted by almost every country in the world and these are the goals for the world, until 2030. It includes things like, reducing poverty, eliminating hunger, addressing climate action and lot of other goals. There are 17 goals in fact.

Now the question is always, what does astronomy have to do with ending hunger or any of the other goals? In fact, the plan 10 years ago, the plan to use astronomy for development, the people who drew up the plan, the IAU, actually used this diagram to sort of encapsulate why astronomy is an effective tool to be used for development. It’s Because astronomy as a field is very very interdisciplinary. So it links to science and research of course, and various fields of science – there is astrophysics, astrochemistry, astrobiology, astrogeology, and lots of other fields. But also astronomy speaks to lot of technology.

In order to do astronomy, people had to invent technology and these technologies then found applications in every day life. So everybody always talks about CCDs which were actually invented for astronomy and now is used in almost every device. There is also development in computing that came about as a result of needs in astronomy and development in optics and so on. The third side is the connection to culture and society. Astronomy has always had a deep impact on humans and we’ve had a long history with the skies. Every community, every tribe and every society in the world has some history with the skies, starts and with the planets. So it easily inspires and fascinates people and we want to use all these things together in order to try to reach these SDGs, sustainable development goals.

I’ll show few examples of how previously funded OAD projects have done this. In the middle there you see the 17 SDGs and we have various boxes pointing to some of the SDGs. If you see SDG 4, it’s quality education, and we have funded projects that have used astronomy to build capacity at school; level and university level and done teacher training.

So these projects have actually used astronomy as a gateway to teach other subjects, like mathematics or even literacy. Then of course, astronomy needs sort of, observatories that are remote, from pollution, whether it’s visible – this means that astronomy observatories tend to be located in areas where the region itself is not as highly developed as a big city. This is actually an opportunity for the astronomy community to work with the people who are living near the telescopes, so we have funded an astronomy observatory program in Indonesia which did just that. They worked with the community to understand their needs and then tried to help them wherever possible. There’s also astro-tourism, which is linked to what I just said. People want to see these big telescopes these marvels of technology and there is opportunity for tourism industry and also in case where these observatories are remotely located, it’s an opportunity for the local community to benefit from these other tools. So there’s also astronomy for diplomacy, bringing communities together, that might have conflicts or other historical reasons why they did not work together or live together and astronomy maybe can be used as a tool and in this case to bring people together with a shared love for the sky.

So these are the projects that we funded ourselves in the last 6 years or so, but there have been other [people] outside of OAD who have also used astronomy in various ways to benefit society. [There is] this project called STFC Food Network has been funded by the UK government, and is trying to apply astronomy related techniques to improve food production distribution. Astronomy is just one of the fields that is being used in this project. It’s a very interdisciplinary project but astronomers do find a prominent place. It’s actually not a very obvious link – using astronomy to solve the world’s hunger crisis. And there’s another one that was recently in the news, using astronomy techniques, so the techniques used to detect stars, are being applied to detect animals in Wildlife conservation. This then links to goal number 14 and 15, life below water and life on land, again, not very obvious connections.

So astronomy is being used in lot of different ways. Couple more examples in this slide where it links to goal 11, sustainable cities and communities and 3, good health and wellbeing. There are many different ways Astronomy is being used and again this is not just limited to astronomy. Other fields have their own strengths that are being applied, that can be applied in the cause of global development. Astronomers are the people in the astronomy community, including those doing outreach, would in the future, possibly have to work with people in other fields in order to find ways to use the knowledge in these fields for development.